From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Lau, Zack, KH6CP" <zlau@arrl.org>
Subject: [2738] RE:
Message-ID: <m0vGRrw-000f4ZC@mgate.arrl.org>

G0DJA wrote:

> Es seasons usually allow some DXing with lower power. Mind you the
>   "life is too short for QRP" brigade are very active on VHF, and any
>   newcomers usually get " told " that they MUST use QRO......

If you want to get VUCC on 2 meters from New England, its hard
to disagree. Even the big guns need a couple of years and a
few good openings.... I'm not sure that QRP VUCC has been
achieved by anyone on 2M.... anyone up to the challenge?

But, the ARRL Grid Awards are certainly possible with QRP on 6
meters, as well as the microwave bands.

Zack Lau KH6CP/1 zlau@arrl.org

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: jim hale <kj5tf@mctc.com>
Subject: [2753] 2 Watt @ 12v Solar Panels $20.
Message-ID: <326FB9E2.50CA@mctc.com>

I'm always looking for low cost solar,. And the latest catalog from
American Science & Surplus Nov/96 has a pretty good deal. Right on the
front cover. "One square foot of Sunshine power. 1/8" thick and 26 oz
mass. The purple plate glass and wires generate up to 12v at 166mA and
2 watts." cat# 26325 $20.
This is old technology solar, but for $20. you could charge a small
btry pack and run for hours. Being glass, I think I would keep this one
at home.
I've not tried it, but have ordered from these folks before and they
are good about returning defective goods. So with that its a good start
for a solar powered station.
They also have surplus rechargable batteries of all kinds.

Address; 3605 Howard St Skokie, IL. 60076   (847) 982-0870

                  Good luck, 72/3'z de Jim

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Dennis Marandos <k1lgq@dennis.mv.com>
Subject: [2731] A guy could use a couple of bucks.
Message-ID: <1.5.4.32.19961024144124.0033dde0@pop.mv.net>

de Dennis Marandos - K1LGQ

I am relaying the following letter for wider distribution. This is the actual letter, word for word, from Alan Plotnick - NN1X.

- -

Dear Dennis:

I am a member of the New England QRP Club. Less than a year ago I bought a QRP PLUS Index Labs transceiver and this past April I had it up-graded so that it is now the latest version. My plan was to go back packing with it. Unfortunately, my health has been very bad and I had to give up the idea of using this rig in that way. Which is why I a writing to you. Can you let members of the club know that I have a QRP Plus, 1996 latest version, for sale? I will include a microphone, manual, original box and cable. The advertisement is CQ and QST list the price at $695 plus $10 shipping + handling and they don't include a microphone which adds $25, for a total of $730. I am asking $550 for everything including shipping costs. Or if someone wants to make a best offer I will consider that too.

Please let the club know about this since there may be someone who would like it and wants to save some money.

73,

Alan Plotnick - NN1X
77 Woodlawn Street
Hamden, CT 06517
Phone: 203/281-3915

Make all inquires to Alan NN1X and good luck. This letter was dated October 17th and I received it October 21st. Good luck

Dennis Marandos - K1LGQ
Editor - New England QRP Club newsletter

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>

Subject: [2713] AD811 in a transmitter - what's the point really?
Message-ID: <Roam.3.0.1.846139573.15628.myers@bigboy>

A little reality check...

I'm probably the last person that would ever discourage someone from doing something "just because", but I question the real point in building a 1W CW transmitter using a $9 op-amp in addition to an RF transistor.

The reason such circuits are publish are really to demonstrate the AD811 (or whatever the 'star' part is) can really so something. They're demonstration circuits, and often not really optimal.

Let's be honest - a couple of 2N2222As and associated passives would do just as well in this particular application. The parts wouldn't cost nearly as much, and are much more obtainable. Perhaps a minimum space application (like putting a transmitter inside a tic-tac box) would benefit, but maybe not - a clever builder can stuff a lot of parts into a small space, and, using SMD devices, there's no issue.

I happen to really enjoy playing with exotic semiconductors, I really do. But, at the same time, I've developed a sense that just makes me question why one would use an IC that costs $9 instead of a handful of parts that costs $3 (or less). Size and ease of reproduction may be important factors, but we're talking about a QRP CW transmitter here - something that the denizens of QRP-L have already proven can be done reliably and in little space.

I think it would be more interesting to find an application where this IC brings some singular advantage, rather than proving the wheel can be re-invented yet another time.

Please don't think I'm trying to discourage anyone from building the EDN circuit - it looks neat - but note that I'm *encouraging* people to think of something more novel, useful or impressive - something you can't do equally as well for less money and hassle (yes, hassle - having to order an exotic op-amp is more hassle than scrounging 2N2222As). Perhaps you just want to start working with the AD811 and the CW transmitter is a good starting point - wonderful! But, using it as nothing more than a CW transmitter is doing something the hard way for no real advantage.

Ahhhhh.... now that I have that off my chest, I'm sure someone will flame me. It seems like we're getting more flames on QRP-L lately, like the gem last week condemning the people that dare to participate in technical discussions. In all honesty, we're soooooo much better than the newsgroups have become, there's really nothing to complain about, but I've come to expect a Signal-to-Flame ration of near

infinity on this list (all Signal, no Flame), and I'm not ready to
compromise that standard. So, if you must flame me, *DO IT IN PRIVATE E-MAIL*,
and spare the other members of this fine list...

;-)
Dana KK6JQ
Dana@Source.Net

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>
Subject: [2790] Amplifier questions
Message-ID: <Pine.OSF.3.95.961024151343.678B-100000@duke.usask.ca>

I was playing with my oscilloscope last night and thought I would start
with something simple, so I tried to trouble shoot an audio amplifer
(Telefunken) that is not working properly.

The problem is that it will work for a while then suddenly the resistors
to the final and second to final stages get really hot and the fuse blows.
I suspect that the problem is that the second to last transistors work
fine when cold but then seem to short out when they warm up.

Does this seem like something other people have seen transistors do? Or
should I be looking at something else like an electrolytic capacitor?

BTW the amplifier has two channels and each channel splits into two
amplifiers where the signal is combined in the end. The second to last
fuses are numbered A817 Y and C1627 Y. I suspect one is NPN and the other
is PNP. If I remember correctly the last stage runs at 30V and the other
stages run at 10V.

Thanks.

Brian.
+--+
| Brian Buydens, Computing Services, University of Saskatchewan |
| email: Brian.Buydens@usask.ca |
| VE5RDV |
+--+
| The grand leap of the whale up the Fall of Niagara is esteemed, by all |
| who have seen it, as one of the finest spectacles in nature. |
| -- Benjamin Franklin. |
+--+

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Peter Beedlow <nn9k@worldnet.att.net>
Subject: [2799] Antenna info
Message-ID: <2.2.16.19961024170941.193757ac@postoffice.worldnet.att.net>

If you live on a small city lot, want to put an antenna in the attic or looking for a non-vertical field antenna, check out the 'WEETENNA' article by George Murphy, VE3erp in the November issue of CQ.
Peter Beedlow, NN9K
EN41TL (IL)
nn9k@worldnet.att.net

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: doster@umr.edu (George Doster)
Subject: [2741] Anybody got a manual for a DX-20??
Message-ID: <199610241548.KAA21118@hermes.cc.umr.edu>

I found one of these in my closet last night. I seem to remember picking this thing out of a dumpster a few years back. It's got a crystal in it for 7.140. Popped the hood and a few things need some help. A coil is broken free and a few other connections are broken. Has anyone got a manual (construction or operating? both?) for a Heathkit DX-20. Its CW only. If you've got a manual you want to get rid of or make a photocopy of I'll gladly pay shipping and copy cost. Let me know.

Jay
George Jay Doster doster@umr.edu N0PMY
Cloud and Aerosol Sciences Laboratory
Univ. of Missouri - Rolla

QRP-L #739

Disclaimer: All spelling mistakes are my own and not Webster's.

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Roy Boggs <rboggs@pcc-uky.campus.mci.net>
Subject: [2766] Apology to all-Serious
Message-ID: <2.2.32.19961024181435.006eb4d4@pcc-uky.campus.mci.net>

Hi everyone,

Not long ago I, in a fit of unfounded frustation, I sent in message to this fine list that was generally percieved as an undue flame to the entire group. In it I made some really vulgar references to the content of some postings as BS. I also unwisely characterized some postings as chiming in unneccesarily. To compound things, (I have been told) I was very unclear and amibiguous as to who my anger was vented. Let me explain a few things and try to clear up the mess I created:

First, I unwisely reacted to the many messages.. in which the discussion was to create another group.....to reduce the number of messages!. Anyway, like a real smart-aleck, I composed a hastily written diatribe that to me was clear, (but actually wasn't at all); I decided it was too harsh and instead of sending it, I put it in the queue to revise it later. Well....later I forgot about it and came in to GET email..and whamo..Eudora Pro sent it out since it was in the sending queue!!! I said "Oh no....I wasn't going to send that durn thing, but it was too late.

Well that's HOW it happened, but more importantly, I shouldn't have written such a scathing letter in the first place. Now, let me say unequivocally (but softly) that I did not intend to flame the entire list (yet it appears that way). Next, I was NOT attacking the fantastic technical discussions, which by nature, require including excerpts from the post being referenced. These I welcome with all eagerness, and in fact these are the ones I was worried we would lose in the volume of email. I have to be honest and say that it is the super long posts (ok by me) that are copied in their entirety, with a simple "I agree" or "Way to go Joe". This only bothers me because we have discussed this before and many pay for email based on volume. Still, it should have been none of my business and I regret everything I said.

My plea was for all of us to be good ops on the air and on the list, and I certainly did a lousy job of getting across my real intent. I think this keyboard society leaves a lot to be desired; as Nils once pointed out to me...it's pure bare English without inflection, facial expressions, tone, volume, body language, etc., crammed into email and shot off instantly.

Anyway, for those that emailed me direct to tan my hide, I have apologized to them direct, and now I must make amends to the whole group. I am sorry for my poor choice of words of which were both unclear and in poor taste. It was certainly a bad example of how we are all expected to behave, and I can promise it won't happen again [from me at least :-)].

Sincerely and repentantly, KE4KDT

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Jim W7LS <w7ls@brigadoon.com>
Subject: [2812] Argo 509 on 160???
Message-ID: <199610250136.SAA16221@olympic.brigadoon.com>

Ok, ok..... Same message as above for the HW-8. 73 de Jim, W7LS

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Thomas J. Whalen" <whalen@swcp.com>
Subject: [2814] Bare Essentials
Message-ID: <Pine.SUN.3.91.961024193447.19394B-100000@kitsune.swcp.com>

  To all that inquired about the B.E. xmtr, tomorrow is the big mailing day! So, if you sent me your address, the schematic will be in the mail in the afternoon. I'm going over to the Electronic Surplus joint here in town and see if they have some 50C5 and 6AQ5 tubes and start building my old novice rig! I will be using a Motorola R-390 for the companion rcvr.Also, on the work bench is a one transistor cw xmtr for 10 meters that I'm building. Can't wait till the sunspots come back! I like my new dsp-40. Just wish it would reject the heterodynes more effectively. 72 and 73 Tom WB5QYT " Happy Rails to you!"

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: chuckolson@juno.com (Chuck Olson)
Subject: [2760] Beacons and qrp-l
Message-ID: <19961024.101837.4815.0.chuckolson@juno.com>

Hey qrp-l'ers:

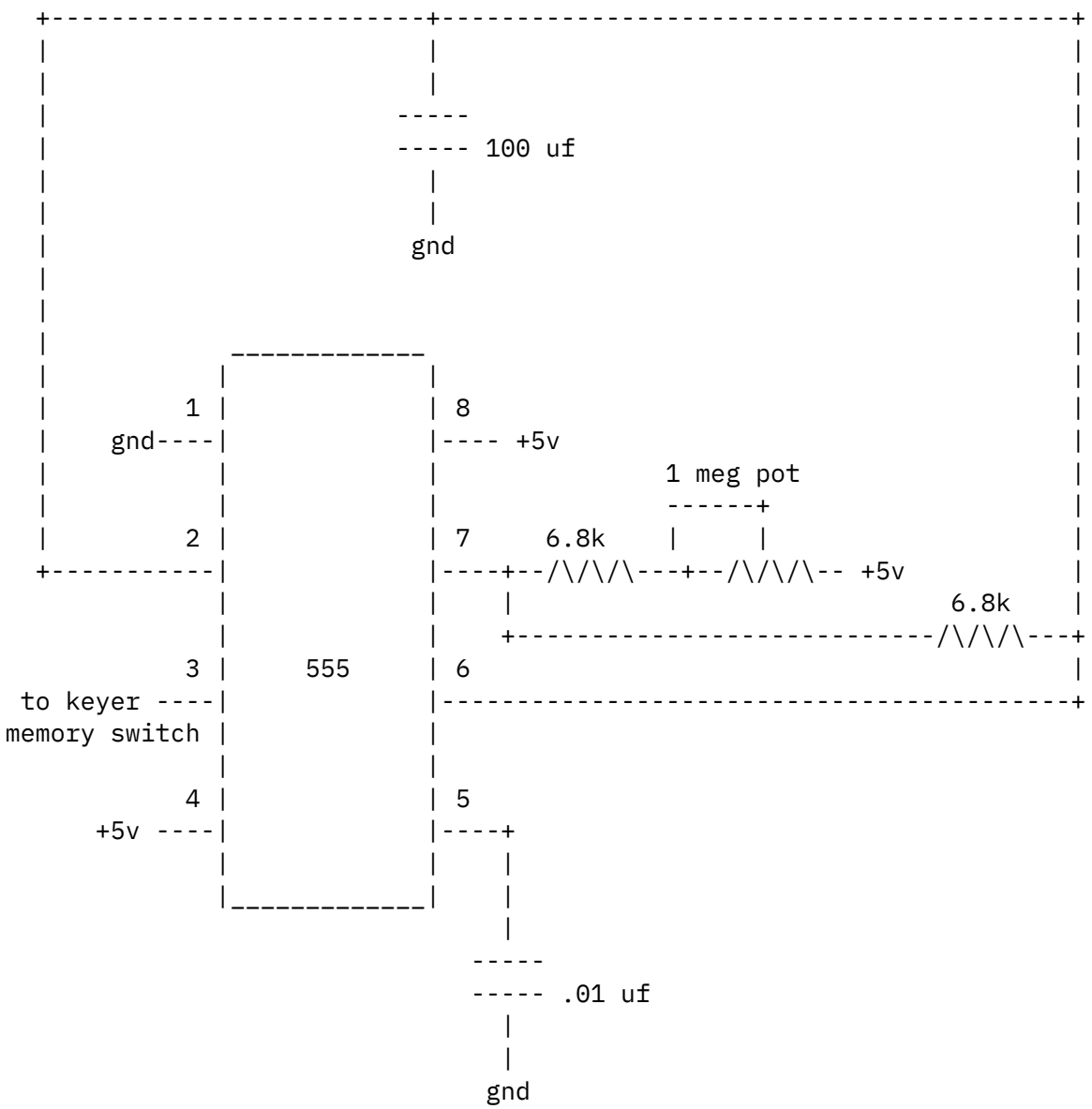
I think that one of the neatest things this list offers is the immediate feedback on a beacon. When I get my Argonaut PTO fixed, I'm planning on trying a beacon myself.

One of the fellows on the list was asking whether my keyer can function as a beacon controller - he wanted to be able to send his beacon message and then wait for a certain period of time and then restart the process.

I was thinking about this and there really is an easy way to accomplish this with most any memory keyer. I used an old aftermarket wiper delay control box that I took out of my old Buick. I opened up the unit to find a pot controlled 555 timer which drove a relay. The 555 is configured as a .5 hz to .05 hz oscillator with a really ugly duty cycle

(about 1 second low and the rest of the time high). I hooked the relay output of the wiper delay across one of the memory push buttons on my keyer. I can now send a beacon message varying from about once every 2 seconds to once every 25 seconds.

For those without access to a wiper delay module, here is my interpretation of the 555 circuit:



This is the basic 555 circuit we have all used - in the original wiper delay control a 220 uf cap and a 100k pot were used - I didn't have them in my junk box so I substituted. The origianl circuit also had a 33 uf bypass cap from the supply voltage to ground. You might also want to use

a pot with a power switch and add an LED circuit to let you know that the timer is turned on. This circuit will allows delays up to 90 seconds between each beacon start.

You should be able to hook this to any memory keyer that uses a momentary push button wired to ground to actuate the memory play funtion. Note that a keyer with a scanned keyboard where the switches are connected between two pins on the keyer chip won't play with this circuit.

Best Regards,
Chuck Olson
WB9KZY
Jackson Harbor Press
Washington Island, WI

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: John Twilley <jmt@NDA.COM>
Subject: [2764] Beginner wants to put something together.
Message-ID: <199610241814.OAA17237@nda.nda.com>

I don't yet have my license. I know half the code and expect to pass at least the 5wpm test when I get around to taking the test for Tech Plus.

I like tinkering. I'm not gifted -- of the past three radio receivers I've attempted to construct in the past five years, one drew blood (sharp metal) and another caused an interesting burn on my hand from a soldering iron. But I try. The third one was a really lame spring-and-wire sort of thing.

So I want something I can put together and listen to the amateur bands. Something that I can listen to slow code on. :-) Perhaps even plug into the line-in of my soundblaster, and teach the computer morse code (I'm much better at coding than building) or something.

But it can't be difficult to build, or else it'll waste my time and money, and perhaps add to the injuries...

Help?
Jack.
--
John Twilley | Net Daemons Associates, Inc. | Voice: (617) 937-3338
jmt@nda.com | 400 West Cummings Park, Suite 4250 | Fax: (617) 937-3775
             | Woburn, MA 01801 | Pager: (617) 532-4257

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Rogerio Gonzaga <gonzaga@med.up.pt>
Subject: [2716] Bird elements wanted
Message-ID: <198702240929.KAA07241@hipocrates.med.up.pt>

Hi, fellows,

I could get a power meter, similar to the Bird ones, and that works properly with the Bird elements, on a surplus sale. Unfortunately it carried no elements. I am looking for cheap element(s), from Bird or other manufacturers, if compatible, preferabely (but not necessarily) to the HF range, QRP. Tks es

72 de Roger, CT1ETT

Rogerio A. F. Gonzaga, MD
Surgical Professor at the Faculdade de Medicina do Porto - Portugal
Ex-Honorary Surgical Registrar at the Hammersmith Hospital - London, UK

Radio Amateur CT1ETT QTH Loc IN51re
G-QRP Club # 8673 ISWL # CT-20734 QRP-L #516

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Buck Switzer <n8cqa@tir.com>
Subject: [2735] C6A/K8DD
Message-ID: <199610241506.LAA11593@tir.com>

Gang - Worked Hank, K8DD, on 10.108 last night. He'll be on 30M quite a bit of the time prior to CQ-WW-SSB start up this evening. Also listen for C6A/AC8W this afternoon. Hank was about 5-5 to 7 here in SE MI.

72/73

Buck Switzer, N8CQA, 654 Georgia Ave., Marysville, MI 48040-1243
Home:(810)364-9640, Work:(810)949-0151, Fax:(810)364-8179
n8cqa@tir.com, n8cqa@juno.com, am441

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: PasDave@aol.com
Subject: [2712] California Board SSB Rig
Message-ID: <961024021952_1678857509@emout02.mail.aol.com>

Hi Friends! I have just bought the pc board for the "California Board" 75M

SSB rig. I have the article from QRPp, but want to find all the information I can on the rig. If you are working one, how do you like it? Are there any lists of errata or corrections to the QRPp article? I'd appreciate all the information I could get on the rig. Thank you very much. Dave, KE6PUF
 PasDave@AOL.COM

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "David Kreinberg" <kreinbd@ccgate.dl.nec.com>
Subject: [2723] CQWW QRP
Message-ID: <9609248461.AA846171479@smtpgw.ccgate.dl.nec.com>

Gang:

I plan on working this weekend's CQWW contest QRP-style
from the home QTH.

This will be a two-fold exercise:
1. To get in the upcoming SS contest mode
2. To use a computer-based logging program (CT) for the
   first time!!

My question is simple and silly, but important. What is
our (my) zone for the exchange? Is the US just one zone,
or does Dallas, TX have its own zone?

Thanks for your help. Good Luck to you all in the exciting
contest season ahead!

73 de Dave AC5GY Dallas, TX

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: mvjf@mvubr.mv.lucent.com (James M Fitton +1 508 960 2577)
Subject: [2779] Dayton
Message-ID: <199610242019.QAA21017@alig1.firewall.lucent.com>

Dayton-L does not exist yet.....Sorry to take up the bandwidth
but here is where the gang stays at Dayton.

Bill,

The (name changes from year to year) Inn at Miamisburg/Dayton :

Some folks rent cheaper hotels down the street but come to the Inn
for QRP activities.

QRPers renting the 60+ rooms help support the QRP functions,
hospitality suites, meeting rooms, forum rooms...etc.....

The Innkeeper doesn't care if we run wires all over the place like
a bunch of madmen, and here is where it all happens.

I like being with the gang, and if the bargain hunters hadn't said
anything to me, I might have thought I was enjoying myself ;-)

Myron Koyle handles reservations for QRPers and I think he is on
QRP-L.

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Bill Acito 24-Oct-1996 1615 <acito@asdg.ENET.dec.com>
Subject: [2781] Dayton '97
Message-ID: <9610242016.AA00699@us1rmc.bb.dec.com>

> While dayton-l is on LOA...
>
> This year I want to go... never been, want to go at least
> once.
>
> Recommendations on hotel?... a nice one, not the Ritz, but not a
> sleeze joint either. I think I remember some complaints about the
> Days Inn from folks last year. Within, say 1/2 hour?
>
> b

. . . . . - I own my own words - . . . . . .
Bill Acito
acito@asdg.enet.dec.com
|d|i|g|i|t|a|l| Digital Equipment Corporation Hudson, MA

KC1GS qrp-ne qrp-l adv-rs arci norcal amsat-na arrl-life

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: ji3m@scubed.com (James R. Duffey)
Subject: [2793] Dupe Sheets from Sweepstakes Hints
Message-ID: <v02130500ae95899e8b60@[192.31.66.229]>

Kevin; in reply to;
>
>Please let me know what a dupe sheet is, and how I'd use one in the SS.
>

Sure. I'm sorry that I used terms in my post that not everybody is familiar with. I certainly don't want to practice technobabble. Plain speak is most efficient. Neologisms will be next.

A "dupe sheet" is a method of keeping track of contacts that can be easily accessed when a new station is heard in a contest to see if that station has been worked before or not. Most contest computer loggers, such as CT that Chuck referred, to do this automatically. Us pencil pushers have to do a little more.

You can get a dupe sheet from ARRL, possibly from their Web Site. It may be part of their Sweepstakes Package. I make my own. For a big contest like SS, I take a 11 x 17 sheet of paper. Across the top I divide it into 26 columns labeled A to Z. Across the side I divide it into 10 columns, 1 through 0. When I work somebody I write the call down in the box corresponding to their call area (row) and last letter of the call. Therefore, if I worked KB2TEO I would put KB2TE in the box corresponding to the 2nd row and o column. For AB5OU I would write AB5O in the box corresponding to the 5th row and Uth column. I sort by the last letter of the call suffix and don't write it down, others sort by the first letter of the suffix and write the whole call down. This works fine for modest efforts, say up to 700 or so calls.

I think that the ARRL Operating Manual has a section on dupe sheets and contesting that shows a few more options. I also remember seeing an article in a stack of old Radio Communications I have on dupe sheets that used yet a different technique.

Using a dupe sheet is easier in practice than explaining it over the net. I write the calls down in the dupe sheet while the memory keyer is sending the exchange.

For sweepstakes, where you can only work the same station once, regardless

of band, one dupe sheet will suffice. For other contests, where you can work the same station on different bands you need a dupe sheet for each band.

For contests like the Spartan Sprint, where I know I will only work a few stations, I take a regular sized piece of paper, 8.5 x 11, and put down the 10 rows 1 to 0. I use two columns, one for 20 and one for 40. It works great since you only have a few calls for each call area to scan.

I am posting this to the net as I now realize that if Kevin didn't know what a dupe sheet is others might not either. You experienced contesters please begrudge us the space and bandwidth. Those who are better informed will not take up your time during the contest as dupes and your rate will go up!.

One of these years I really have to set up a computer in the shack to do all this logging stuff. I'll bet it would make contesting less tiring. - Duffey KK6MC/5

James R Duffey KK6MC/5 DM65
30 Casa Loma Road
Cedar Crest, NM 87008

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [2797] Dupsheet
Message-ID: <199610242209.WAA09952@chuck.dallas.sgi.com>

Another form of a dupsheet is to take an 8.5x11" sheet of paper.

Make 10 equal columns labeled 0, 1, 2, ..., 9
Then make 26 rows labeled A, B, C, ..., Z.

Make this puppy as large as possible on the sheet.

What I do is use the first letter after the number when I work a station and use that to determine which row to write in and the number to determine the column. Thus KI6DS would be in the 7th column (6 labeled) and the fourth row (D labeled). W1AW would be in the 2nd column (1 labeled) and the first row (A label).

When you work a station write their ENTIRE call in the block as small as possible but readable.

Do this until the end of the contest and then turn it in.
If you see a guys call in the proper block, don't try to work
him/her again. That's a dup.

Oh, write neat and write small. Think positive. You will need
the room.

Use your computer and printer to generate a neat form.

ASCII Sample

   0   1   2   3   4   5   6   7   8   9

A

B

C

D

E

...
: Chuck Adams (K5FO CP-60) WAS 40m/30m/20m=49/49/50
: EMPS QSOs=2 STATES(w/c)=2/0 DX=0 : MO TN

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Roy Boggs <rboggs@pcc-uky.campus.mci.net>
Subject: [2729] DX last nite; List variety good
Message-ID: <2.2.32.19961024142523.006a9080@pcc-uky.campus.mci.net>

Gang,

Last night I took a stroll down to the bottom of the 40M band for a change
and was pleasantly surprised to find the bottom 10-15 to be rockin' and
rollin' with 'not-too-distant' DX to the north and south. With 5 watts out,
the boys on Sable Island (2 stations) were a piece of cake even with a
pileup; going south, Aruba (1) and Neth. Antilles (2 stations) were equally
strong and again, with big loud QRO pileups. I am amazed how these ops can
pull 5 puny watts out of all those gangbuster sigs. Of course it took 3-4
tries and was probably lunacy on my part to jump in the fracas, but I
tail-ended consistently and it paid off with 6 in the log book (including
one to CO8LY....his Tone was 9!). I have of late been concentrating on
QRP-QRP contacts so this was a nice change plus being an adrenalin pumper!

On another topic, I am really happy to see the variey of subjects on the list lately; good humor (super!), technical (V.G.!....more!!!), equality (needed), and my favorite, operating. I would love to hear more milliwatting tall-tales (I have been astounded at even my own experiences).

Finally, for my request on advice on the Knwd TS130SE, I got a sack full of replies from some really sharp cats and I thank each of them for the good info.

de KE4KDT Roy

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [2746] Female voice and SSB success
Message-ID: <Pine.3.89.9610241040.D14150-0100000@w3eax.umd.edu>

There is NO question, in my mind, about whether or not higher-pitched voices can be more easily heard on SSB.

When I was in high school, I used to have my mother come into the shack and sit down and try to snag contest QSOs for several reasons:

1) I always wanted her to feel as though what I was doing wasn't weird.
2) I thought she might like it.
3) I had a much better chance of getting through with her at the mic than ME at the mic.

Number three always resulted - I'd call for 10 minutes, and she'd call twice and get through. I've had the exact same experience with the XYL at the mic.

Of course, CW is another story.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** 145.490- 147.225+ PL 156.7 *

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Jim Francoeur KC1FB <jim_kc1fb@pipeline.com>
Subject: [2725] Fox one/half
Message-ID: <1.5.4.32.19961024134559.00674070@pop.pipeline.com>

The other night Tim sounded so strong when I finally got home and was able to start hunting. I got my info from him when he was 559 or better, gave him mine and on the break the band crashed.......I just heard his call and a very weak "no....".

With my little <1 Watt signal I'm suprised he heard anything. What's a half a fox skin worth?

I hope this makes the list....new ISP with "almost" the same address as before. That's why this is late.

72,

Jim .5 fox plus 1 N/T fox

Jim Francoeur KC1FB Norwalk, CT QRP-L #29

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Ahrens Tim" <tahrens@devmail.sps.mot.com>
Subject: [2730] Fox: Final Results 10/22
Message-ID: <9609248461.AA846178919@devmail.sps.mot.com>

Here's the finals... a few small corrections after removing fluff from between my ears!

Many comments about the QRM directly on frequency... sorry folks, but I didn't hear it.. Next time somebody please say something about it... it's easy to shift freqs. We could have done a few more less frustrating (from your end) QSOs.

Thanks for all of the nice words about the stint... and thank you all for the opportunity to become a sought-after station... I can see why DXpeditions are a lot of fun (also work).

Gotta put my phased verticals back up.... you can get spoiled by such a large antenna. Hmmmm.. it's only about 100 yards to the tower, wonder how much loss 1" hardline has at 7 mhz?? naaah

thanks & 72s

Tim

NR	Time	Pwr	Call	Sent	Rcvd	Name	State	Nr/Pwr	
1	1:02	2	K5UP	559	579	GLENN	OK	21	
2	1:03	2	WA8CDU	579	599	BILL	MI	412	
3	1:04	2	W8DN	589	599	MIKE	OH	575	
4	1:06	2	N3KFL	559	589	AL	PA	36	
5	1:09	2	KK7BD	449	559	DAN	AZ	696	
6	1:11	2	KU7Y	559	559	RON	NV	17	
7	1:13	2	W1HUE	569	539	LARRY	ID	228	
8	1:14	2	WA0RPI	559	579	JIM	MN	5w	
9	1:16	2	AE4IC	559	579	BOB	NC	54	
10	1:18	2	AE2PF	559	599	DAVE	NY	306	
11	1:20	2	N6ULU	569	559	STAN	CA	66	
12	1:23	2	VE7SL	449	559	STEVE	BC	769	
13	1:27	2	K2VNM	449	335	BOB	NY	735	
14	1:29	2	WO3B	559	549	BOB	MD	195	
15	1:32	2	NQ7X	579	579	FLOYD	AZ	343	
16	1:34	2	KI7MN	579	459	BOB	AZ	271	
17	1:36	2	KK6MC	569	339	JIM	NM	411	
18	1:38	2	N6WG	559	559	BOB	CA	27	
19	1:40	2	NA5N	559	559	PAUL	NM	38	
20	1:41	2	WA6HHQ	569	559	ERIC	CA	4w	
21	1:43	2	AK1P	559	559	PAUL	CA	284	
22	1:45	2	K1MG	559	479	MIKE	CA	614	
23	1:46	2	N2GO	559	579	JIM	NY	381	
24	1:48	2	AA0XI	569	559	MARSHALL	CO	153	
25	1:50	2	NN9K	589	599	PETER	IL	5	
26	1:51	2	N9DD	579	589	TOM	IN	32	
27	1:53	2	K9DZE	569	589	ALLEN	IN	112	
28	1:54	2	KE4YH	559	559	STEW	FL	580	
29	1:56	2	KB9IUA	559	599	KEVIN	IL	384	
30	1:58	2	NY9B	559	449	ROY	IN	446	
31	2:02	2	N2VPK	579	339	MARK	NY	314	
32	2:06	2	KE4KT	449	559	ROY	KY	322	
33	2:08	2	WO0Q	449	559	MARTY	CO	4w	
34	2:12	2	KA5DVS	559	559	JIM	NJ	63	
35	2:15	2	K2NF	559	599	NORM	FL	220	
36	2:18	2	KC1GS	449	459	BILL	MA	214	
37	2:20	2	VE3SP	569	569	RON	ONT	464	
38	2:22	2	KA3WMJ	569	539	KEN	PA	355	
	2:26	2	KC1FB	449	559				
39	2:29	2	AD4ZE	559	599	WARREN	NC	78	
40	2:33	2	W3PNL	449	559	JOE	PA	5w	

41	2:36	2	W9ZSJ	559	569	GEORGE	IL	1w
42	2:39	2	WA6NAE	449	449	DWIGHT	CA	5w
43	2:41	2	KC7NEV	449	559	JOE	AZ	191
44	2:43	2	W6BAB	559	569	HARVEY	CA	2w
45	2:45	2	KO6KA	559	589	ROB	CA	176
46	2:48	2	AA7WT	559	559	MAL	MT	2w
47	2:51	2	AA6R	559	559	GARY	CA	406
48	2:52	2	AB7MY	559	599	GARY	AZ	571
49	2:54	2	AA7QY	559	569	ROGER	AZ	62
50	3:03	2	AB7HI	549	339	STEVE	WA	68

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: nskousen@scientech.com (Niel Skousen)
Subject: [2800] FOX: Propagation ?
Message-ID: <v02140b0fae95a0d499c3@[198.60.91.132]>

>   A strong burst of geomagnetic storming over the last six hours has
>pushed middle latitude geomagnetic indices above the minor storm threshold at
>03:00 UTC. This activity is the result of a high-speed solar wind stream
>pushing past the Earth from a well placed solar coronal hole. It has not yet
>been confirmed whether a recent confirmed coronal mass ejection may be
>contributing to the activity.

Ok, next question....

Would the conditions above cause the band to fold, or get really hot ??

Last nite was interesting in that 40m (where I'm at anyway) just seemed to
switch off about 0300z. Any thoughts ?

TNX Niel

--------- -.. . .-- .- --... ... .-   --------------------
Niel Skousen; S.Eng, SCIENTECH.SPG   nskousen@scientech.com
208.525.3742, FAX 529.4721 Idaho Falls ID   WA7SSA QRP-L.119
--DN33wm---

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Bob Tellefsen-CNSE97" <Bob_Tellefsen-CNSE97@email.mot.com>
Subject: [2794] FOX: WA7SSA
Message-ID: <M1115504.003.sv3l1.1.961024214522Z.CC-MAIL*/OU=LMPCC10/OU=ILBE/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

Well, I know you were there, Niel, because a friend of mine heard you.

I never did hear you, though, and I never heard anyone calling you either.
Guess conditions were just too far gone to do much last night.
Hope you will try again later on, and give us another crack at you.

72, Bob N6WG Newark CA (on SF Bay)

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Gregory J. Buhyoff" <buhyoff@vt.edu>
Subject: [2777] FS: Ark 20
Message-ID: <199610241950.PAA29365@sable.cc.vt.edu>

I have a factory built, 6 month old, S&S Engineering ARK 20 (20 mtr) radio for sale. It includes the optional keyer. It is in perfect working order (about 3.5 watts out) and in perfect cosmetic condition except for one minor scratch on the case top. Dick has also modified the radio so that a pot accessible from the front (when the front face peice is removed) can be used to adjust the side tone volume.

Asking $250 which includes UPS shipping.

E-mail Buhyoff @vt.edu

Thanks,

Greg KN4FR

Gregory J. Buhyoff
Julian Cheatham Professor
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061

Phone: 540-231-5148

E-mail: Buhyoff@vt.edu

FAX: 540-231-3698

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: kgraham@CSWNET.COM (Kenton E Graham)
Subject: [2810] FS: OHR CLASSIC and EXPLORER
Message-ID: <199610250058.TAA31097@troi.csw.net>

OHR CLASSIC AND EXPLORER for sale:

     Both work perfectly and are scratch free like new.

     The classic puts out about 6.5 watts on 40, 4.8 watts on 20.
     Really nice receiver. $175.

     The Explorer is for 30 m and puts out about 2.6 w. Nice receiver,
     not quite as good as the classic but very sharp. $80.

     Both built by retired Elect. Eng. with 40+ years exp in ham radio.
     You pay shipping....

     Too many rigs here, xyl is starting to NOTICE!!

     -72,73-   Ken K5ID   Arkansas QRP, CW forever...

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From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [2749] FS: Ten-Tec Argo 556 w/NB, 40m module
Message-ID: <Pine.3.89.9610241000.F14150-0100000@w3eax.umd.edu>

New price is $489 plus $19 for noise blanker = $508.

Asking $400 plus shipping.

This one is in excellent condition. It has a few scratches but is
otherwise gorgeous, and works great.

Power output is variable from 1 to 5 watts.
IF bandwidth variable from about 300 to 1500 Hz (maybe wider).
RIT control (+/- 1.5 kHz or so).
Great audio.
NO SYNTHESIZER NOISE (PTO tuning).
AGC decay time reduced from stock via replacement of capacitor.

Meter reads forward/reflected power.
Electronic keyer works from 5 to ??? wpm, digitally settable.
  I think the top end is 50 wpm.
550 mA receive, 2 amps xmit (roughly).

Yes, the drift problem is real, although I rarely notice it. It is
quite possibly the easiest-to-use radio I have ever used. It worked
wonderfully on Field Day in netting 175 or so QSOs, even in crowded-band
conditions.

Again, asking $400 plus shipping. UPS is right down the street from my
house.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** 145.490- 147.225+ PL 156.7 *

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: john andrews <jm165723@eee.org>
Subject: [2740] fs:odds 'n ends
Message-ID: <326F8FBD.7BC@eee.org>

Here in SoCal I try to unload my junque box at a ratio of 3-1.
(Sell 3 lbs. for every 1 lb. I buy). Not very sucessful of late :).

Here are a few items I picked up for sale:

453.5 kHz xtals in HC-6 holders(a BUNCH)-

A lot of variable capacitors

Lottsa 10, 10.920, 6.0 mHz xtals in hc-18 holders

Yep...more of the 15 turn 1" turns counters. Get more resolution
with that multi-turn pot tuned rig.

A few new ceramic 12 position switches for ATU's.

Bought up the last(I think) of the little suppressors that connect
accross the receiver antenna terminals. I'm at a loss to describe
these devices. They are filled with an inert gas and "fire" when a
surge of high voltage energy reaches the antenna input. They are
common to CATV receiver boards. Found(and mislaid) an article in
CQ mag on these items. I believe they were sold by an outfit called

Alpha-Delta under the trade name "Transi-trap".

Bunch of other QRP related parts. Best offers. If you are working
on a specific project, let me know as I usually toss in "extras".

72, John- N5INZ
"What %*!+^ sez hams don't build any more!???"

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Stan Skelton <sskelton@cln.etc.bc.ca>
Subject: [2755] gel-cels, battery, charger
Message-ID: <Pine.SUN.3.95.961024094845.10852A-100000@cln>

Hi all...I have detected a thread here about battery chargers
and gel-cel batteries (I'm now on the digest since the number
of messages has exceeded my capacity to follow daily).

I am building a charger (somewhat modified) from a plan found
in 73 Magazine (Dec 83). It is great for gel cels and ni-cads
alike because it is "smart".

It uses an NE555 chip, using the 2 voltage comparaters to
constantly measure the voltage of your battery. When fed
a constant voltage, (using a 7812 in my case) it will sense
when the battery is below a fixed voltage (customizable) and
feed a current through a 2N2222 to turn on a small relay.
This allows the "charging current" to go "on" to the battery.
When the battery voltage reaches a preset (high) voltage, it will
"turn off" the charging current.

The voltage comparators in the 555 are 1/3 and 2/3 of the
fixed input voltage so you can vary the input from the battery
by adding a couple of resitors and a pot to make it "see" the right
voltages.

The above mentioned 7812, 555, relay, 2N2222 and pots are all there
are to this circuit except a handful of resistors and caps. (assuming
you have a constant filtered voltage supply, read; transformer,
rectifier & elec. cap.) ...Oh ya, and a 1N914 or 1N4004 across the relay
coil.

Stan VE7SKT, qrp-l #34, OHR Sprint 80

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Joe Gervais <vole@primenet.com>
Subject: [2775] Ham Exam Generator Website
Message-ID: <199610241946.MAA08070@primenet.com>

Howdy All,

Sorry if this was already posted here, but it was news to me
so I figured I'd pass it along. Chris (N3XRV) gave me the URL
of a great Ham exam generator. Think he got tired of me whining
about upgrading to Advanced. :-)

"http://w5ac.tamu.edu/ham-exam/"   (Minus the quotes, of course)

Was surprised to find out I could already pass the Advanced
(the ARRL Advanced Manual does a great job of covering theory,
IMHO). Anyway, thought some of you might want to give it a
shot.

Thanks Chris!

Cheers de KC7NEV,

-Joe, vole@primenet.com, AZ ScQRPions

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Glen Leinweber <leinwebe@mcmail.CIS.McMaster.CA>
Subject: [2745] HB - toroid stray capacitance
Message-ID: <1996Oct24.114758-0400@[130.113.234.7]>

Homebrewing gang,
     Chuck asked "What's the stray capacitance of a
toroid coil?" That was a 'hey, me too' question, so here's
the result of measurement...
Had some toroids wound on T50-2 iron powder ferrite, with
#26 wire, closewound, sealed with a little nail polish.
About 47 turns, in a single layer.
Results...about 2.5 pF stray capacitance.

OK, here's the gory details for the die-hards:
made a parallel resonant circuit with a 10pf capacitor
soldered across the coil. Measured resonance with a

grid-dip-oscillator....14.195 Mhz.
Replaced the 10pf cap with a 5pf capacitor, and
re-measured resonance....18.36 Mhz.
So what (stray) capacitance in parallel will justify
these two frequencies, with the same inductance?
Answer 2.43 pf.
Now this is an extrapolation, and prone to error.
So carefully coupled the coil to the grid-dip-oscillator
with very small capacitance between the coils' wire
ends (draped over the GDO's coil). Have to very
loosely couple for accuracy.....resonance @ 40Mhz.
That's still close to 2.5 pf, resonating with about
10uH.
    Now in the Handbook, toroid winding hints
suggest that you should leave a space between the
start and end of the winding, in an effort to reduce
stray capacitance. I had two coils with roughly the
same inductance. One had the space, the other didn't:
No space....37Mhz. resonance
3/16" gap...40 Mhz. resonance
not a whole lot of difference.
    These grid-dip-oscillators are VERY useful,
in this case more useful than a capacitance meter
or an inductance meter. Why? Because you can couple
to the resonator as loosely as you wish, so that you
don't add extra stray reactances from the meter
itself. That's tough to do with an Autek.
end of lesson...goto next class, Glen VE3DNL.

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: SCN User <nwqrp@scn.org>
Subject: [2739] http://www.scn.org/IP/nwqrp/nwqrp.html (fwd)

can anyone help with info on beacons for this fellow qrper?

--brian, kv9x

    i   NorthWest QRP Club   _____________
-=[scn]=-   --0---/\--
)|(nwqrp@scn.org   /^\^\/ ^^\
  /_|_\   http://www.scn.org/IP/nwqrp   --NW QRP--

---------- Forwarded message ----------
From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Jim Hossack <w7ls@brigadoon.com>
Subject: [2811] HW-8 on 160??????

Message-ID: <199610250128.SAA15544@olympic.brigadoon.com>

Hi, gang. I am interested in using a HW-8 on 160 meters. I know of a mod in the HW-8 handbook, but it requires goofing up the 80 meter band to do it. Anyone know of a 160 mod that doesn't do that, such as one that might goof up 15 meters, instead? I assume that the 160 mod in the book probably could be done with 15 meters instead of 80, but just thought I'd ask.
Tnx/73(72) de Jim, W7LS

"I see, I see!", said the blind man to the deaf man.

CW RULES!

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Gary Surrency <gsurrenc@ix.netcom.com>
Subject: [2711] LONG TECHNICAL discussion of Zin and small-signal amplifiers
Message-ID: <326EF9F7.66EE@ix.netcom.com>

Gang,

There was some indicated interest in this topic, SO, if you don't want to read a long, boring technical dissertation of small-signal amplifiers and Zin calculations:

HIT DELETE NOW! <:-@ pffft!

Daniel Wee and others,

It appears to me that the input Z to your amplifier stage has to be less than the parallel resistances of the base biasing resistors, i.e., the R1 3.3k and R2 1k resistors. In fact, the total input Z looking into the circuit is the combination of 2 sets of parallel impedances, one being the bias network, the other being the transistor's actual base impedance. So we start out with R1 in parallel with R2, or 3.3k*1k/3.3k+1k=767 ohms.

The transistor's input Z is in parallel to this, and from the Motorola specs is in the range of 1k to 10k, with an IsubC of 1ma. Note that since I cannot properly represent subscript notation here, so I will use "sub" to indicate a subscript value, where capitals indicate DC values, and lower case is used for AC descriptions. So what is the transistor's input impedance?

In a common emitter amplifier such as this, Zin is equal to transistor AC Beta times emitter-diode resistance, r'e. Note that DC Beta and AC Beta are not quite the same thing, due to the dynamics of r'e in an AC circuit. r'e is actually related to the change in VsubBE to the change in IsubE, and is

a constant of proportionality, described as K in some texts. It does move up and down on the load-line with changes in emitter current.

Since the AC emitter-diode resistance r'e can be derived from one of several equations, the Zin(base) can vary quite a bit. If the data sheets show the values of hie (input impedance) and hfe (small-signal AC current gain), r'e is determined by hie/hfe. This is usually shown at a small emitter bias current of 1ma, so higher IsubE currents lower the r'e further.

My data sheets show hie can range from 1k to 10k, and hje can be from 100 to 400. So this is a pretty arbitrary way to deduce r'e! No typical values were given on my Motorola data sheet for this device, either.

So r'e could be calculated using values of hie and hje that vary as follows:

r'e= hie of 1000 to 10000 / hje of 100 to 400. That'a a lot of variation! :-)

If, instead you use the approximation formula for r'e=25mv/IsubE, you'll get a very low r'e for an emitter current, IsubE, of 49 mA or: 25mv/49mA=0.51 ohm!

If you use a lower IsubE of 1mA, you'll get: 25mv/1ma=25 ohms. So, the DC emitter bias current has a BIG effect on the emitter-diode AC resistance, and the AC voltage gain and Zin(base).

That is why a "swamping" resistor is often placed in the emitter lead to lessen the effect of r'e on emitter current swings in relation to signal. This resistance, RsubE, is in series with r'e, so it tends to mask it out. A more stable voltage gain can be had this way, reducing harmonic distortion. Too much swamping reduces gain, though, and a compromise is required to get the right combination. Swamping does increase input impedance though, so some swamping is useful in obtaining higher Zin.

It is still good to keep the AC emitter current variations to 10% or less, centered around a DC emitter point, Q, on the linear portion of the DC bias load line. The Q point, is actually located on a small curve that approximates a slope representing the linear range of operation, and is where low distortion amplification will result.

However, since this amplifier is only a driver, supplying an input to a class C RF final amplifier, distortion isn't too much of a concern, since the "flywheel" effect of the class C PA will clean up the distortion to a large degree. This is the great advantage of class C operation, and results in good efficiency since all that is needed is a good positive pulse into the stage to get it going.

That is why only a 100 ohm resistor is connected from base to ground of the PA, limiting base and collector voltage swings to safe levels. For class C operation, collector current must flow for less than 180 degrees, and usually flows for MUCH less. When narrow current pulses drive a high-Q resonant circuit, the voltage

across the circuit is almost a perfect sine wave.

During periods of no drive, the PA is biased off, and does not conduct. Linear operation, as in a SSB amplifier running class B push-pull, or class AB is not needed. All we are transmitting is a carrier wave, not modulation. So don't worry too much about driver stage distortion. We just need to keep it from saturating, which ould create excessive current draw, and clipping. This is a little bit of oversimplification, but is pretty close to what really happens in class C.

Since your driver circuit has a AC bypass capacitor across the emitter resistor, no swamping is in effect for AC signals. So the r'e constitutes all of the input impedance calculations. Using the equation Zin(base)=B(r'e), you'll get an input impedance of anywhere from 5k ohms for a Beta of 200, and an r'e of 25 ohms, to a Zin(base) of only 102 ohms for a Beta of 200 and an r'e of 0.5 ohms. This is outlined
below:

If Zin(base)=Beta(r'e), then:

For 1ma IsubE, r'e=25mv/1ma=25 ohms,
then: Zin(base)=200(25)=5000 ohms

For 49ma IsubE, r'e=25mv/49ma=0.51 ohms,
then: Zin(base)=200(0.51)=102 ohms

These are all approximations at an ambient temperature of 25 degrees C.
The true value of r'e is calculated from measurements taken. It does
vary with temperature and various sample transistors.

The small-signal AC current gain on this device can vary from 100 to 400, depending on emitter current and manufacturing.

>From the data sheet, DC Beta is used below to approximate r'e:

Beta is 160 for 1mA IsubE,

r'e=25mv/1mA or 25 ohms

Zin(base)=160(25)=4000 ohms (calculated)

And,

Beta is 140 for 50mA IsubE,

r'e=25mv/50mA or 0.5 ohms

Zin(base)=140(0.5)=70 ohms (calculated)

Since your amplifier is biased toward the higher emitter current, it is a good bet that the input impedance looking into the transistor base is closer to the lower end of the above values.

And, in fact the data sheet shows an input impedance of about 400 ohms at an IsubC of 50mA. Parallel that impedance with the 767 ohms of the bias resistors, and you'll get:

Zin(amplifier)=Rin || Zin(base), where "||" means "in parallel with.

Using the values just described:

Zin(amplifier)=767 || 400 or,

Zin(amplifier)= 767*400/767+400

Zin(amplifier)= 263 ohms

This is a pretty low input impedance, and additional power gain could probably be realized from using an input matching transformer, assuming low losses in it. Or, another stage of amplification could be used to better match this stage. An emitter-follower would work well to increase the Zin, and reduce the loading of the signal source. Dick at S&S used this approach in the TAC-1 driver stages. :-)

As for the DC base bias current, I have calculated a base current of about 350uA from the equation:

IsubB=IsubC/Beta

So IsubB=49ma/140=0.350mA or 350uA.

You can also calculate IsubB using Thevenin's Theorem and Kirkoff's laws:

Across the 3.3k base-to-collector resistor is 11.3-2.9V=8.4V. Allowing a diode drop of 0.7V across the biasing diode, we have 2.9-0.7V=2.2V across the 1k base-to-diode resistor. Using Ohm's law:

1. Current thru R1, the 3.3k resistor is 8.4V/3300=0.0025454A or 2.54mA
2. Current thru R2, the 1k resistor is 2.2V/1000=0.0022A or 2.20 mA.

Note that the difference in IsubC and IsubE is neglected in the measured voltages developed across the collector and emitter resistors. This is a limit of the measurement accuracy, since IsubB is MUCH smaller than IsubC or IsubE. It is pretty much neglible as a part of IsubC. We can calculate it in the base circuit, however, since the resistors are much larger and small currents will result in measureable readings.

Since some current is not accounted for in the path from the 3.3k resistor to ground thru the 1k resistor, it must be flowing into the transistor base. This current IsubB is found by taking the difference currents in R1 and R2:

2.54mA-2.20mA=0.34mA or about 340uA.

Allowing for measurement errors, this is very close to the IsubB found with the Beta
equation, and is confirmed by a similar IsubB on the data sheet of somewhere in the
region of 300-400uA by the collector and base current curves for a IsubC of 50mA and
collector to emitter voltages near 10 volts.

We can calculate the indicated Beta with:

Beta=IsubC/IsubB or Beta=49.mA/0.34mA=144.

Since your IsubE is 49mA, this is in close agreement with the values shown on the data sheet.A close look at the DC current gain curves shows a hFE of very near 140.

So, using these measured values of hfe information instead of the theoretic values,
and re-arranging the equation to solve for Zin(base):

Given: Zin(base)=Beta(r'e),

Then:

r'e=Zin(base)/Beta

r'e=400/144=2.77ohms (400ohms from the data sheet and a Beta of 144)
(from the measurements)

So, here is the actual value of r'e, for a IsubE of about 49 mA.

I doubt enough gain can be had with a different PA to make up for the small signal levels and drive with only this single stage. An impedance matching transformer could help, or an emitter follower would also work, although it is a little more complex than a simple matching transformer, to be sure.

If I'm way off base here, will someone please correct me. I gathered this info from the Motorola data sheet on the MPS3904, document #MPS3904. This device is an improved version of the more common 2N3904, so your mileage (and gain/Zin) may vary.

The technical reference for this analysis was the book "Electronic Principles"

second edition, by Albert Paul Malvino, Ph.D., Copyright 1979 by McGraw-Hill, Inc. This was my textbook for transistor studies in school, and I used pages 196-215 of the chapter on small-signal amplifiers. I still remember designing and building a two-stage transistor amplifier for a lab project. :-)

I hope this discussion answers some questions. Sorry for the bandwidth. Please, no flames. Thanks for the opportunity to study this. I have refreshed my transistor
theory so much I think I'll go build something! Analog circuitry is sure more interesting than that digital stuff! ;-)

vy 72/73,

--
Gary, AB7MY QRP-L #571 Chandler, AZ (near Phoenix)Grid Square DM43BH

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
Subject: [2767] MRF476 specs, >25dB @ 14MHz?
Message-ID: <326fb371.pandora@pandora.lugs.org.sg>

Hi Gang,

After some more calculations, it appears that the MRF476 used in many circuits is in fact a very high gain part. Essentially I found that my driver stage outputs only about 10mW (approx) into the base of the MRF476 class C finals. The finals, on the other hand yield about 3W under ideal conditions. This is at 14MHz. This translates to a power gain of approximately 25 dB, probably a little less since I cannot remember the exact output at this point of time.

Question 1

According to the power gain vs. frequency chart in Motorola's data book, this is a pretty accurate figure. However, I'd like to know what the experts think. Is this true in real life? Does the part really have this much power gain at 14MHz? Wow! 25dB in a final is a LOT!

Question 2

Another thing, does anyone know the input impedance of the MRF476 at 14MHz? The chart is really tiny but it looks like about 8 ohms for a class C configuration. Can anyone confirm this?

What an amazing device. Actually I am using a 2SC1678 in lieu of the MRF476 here but the two are fairly close parts. Motorola's specifies the MRF476 as an exact replacement for the 2SC1678. My own testing shows that the performance of the two is also approximately equal.

Next I want to try an MRF260 which probably has a higher gain, by extrapolation, since this is a VHF device and 14MHz is off the charts. I welcome any and all comments on this very common part.

For those who are wondering about the MRF475 and its close replacement, the 2SC2075 or 2SC1969, these parts appear to have much lower gain compared to the MRF476. For example, at 30MHz, the MRF476 touts a Gpe (power gain) of 15dB while the Gpe of the MRF475 is only 10dB by contrast.

73 de 9V1ZV Daniel
--

*------------+--------------------------------------+
Daniel Wee	daniel@pandora.lugs.org.sg
9V1ZV	danwee@singnet.com.sg
QRP-L #667	daniel.wee@f516.n600.z6.fidonet.org
+------------+--------------------------------------+

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [2776] MXM Emergenceiver
Message-ID: <199610241947.TAA09525@chuck.dallas.sgi.com>

Barry et.al.,

MXM Emergenceiver
MXM Industries
RT 1 Box 156C
Smithville, TX 78957
(512) 237-3906
Bruce Williams, WA6IVC, Owner and Chief Bottle Washer

This little receiver/transmitter combo was written up in HAMBREW by Bruce sometime within the last year.

The PC board is 2.5"x3.0" and is done by FAR Circuits. The receiver and transmitter are separates but on the same board, i.e. this is not a transceiver. The bands available

from MXM are 30m and 40m.

The receiver is a superhet with three ICs and one FET.
The receiver is fairly respectable for as few components
as it does have. Varactor tuned and covers more than
50KHz, but I lowered the range with a cap change.
It's derived from Bruce's Simple RX which is a hot little
receiver.

Transmitter is a crystal controlled Pierce Oscillator
with 2N3906 keying transistor and a 2SC799 for the PA.
All owners of 2SC799's please raise your right hand.

Remember that I just recently had a question about the
Pierce Osc? Well this is the reason why. The oscillator
transistor was running hot, very hot. I have a blister
on the left finger to prove it. :-) Remember how mom
always said not to touch the stove..... Mom was right.
I could tell from a foot away that something was hot
so like a typical idiot I went around touching the tops
of parts to find out who the guilty party was. Enuff said....

I got the heat problem fixed with a 470 ohm resistor in series
with the emitter and LC circuit to ground. I plan of
reducing the value some later on when I get ready to
check PA output and drive levels.

The waveform from the oscillator is not a pure sine wave
so working on that and think I have it solved with a
cap strategically placed in the circuit. Why all this
fuss over a simple oscillator? Well the PA output filter
is a simple pi with two 270pF caps and 12T #24 on a T50-2
which I calculate as 0.71uH. This gives me 0.045dB at
10.116MH, 6.41dB at 10.232MHz, 17.83dB at 30.35MHz, and
25.86dB at 40.46MHz of attenuation at the harmonics and
fundamental. So elimination of all harmonics is important
before I get to the PA. It's a crucial factor as to what
get's to the filter that determines what is gonna come
out at the antenna. Fourier series at work and real here
folks. I'm up to eight pages QRPp format on the technical
aspects of this topic.

Now I can see some of you guys reaching for the keyboard
and going to scream about FCC regulations etc. Hold on
a minute please. What the filter does and what comes out
are two different things. You need an analyzer and rig
output to get the final values and the big picture.

Bruce ships the 30m version with a 10.106MHz crystal and
I put in a 10.116MHz crystal. So I have to add a cap
to the LC emitter ciruit (C1 which is not used on 30m which
gives me a nice place to experiment here) to get it for max
output so at the present time I don't know what the max output
is gonna be with my mods. I'm guessing 400mW or so.
Film at 11.

What makes this rig neat is the case is about 3.0x3.5x1" and
makes a great little rig for backpacking and travel.
As soon as I it get back into the box I'll put a picture on
the web, but don't rush me on this as I am experimenting
here and writing at the same time.

The entire package is $50 and we will compare with the
SST as soon as one becomes available and the NorCal group
announces. The race is on. :-) SST will be without
case. So someone needs to go into business of supplying
us with experimental cases but the TenTec TF-17 may just
be the ticket. Yep, just might be.

The MXM emerg. is not QSK, but I think it can be. Right
now you flip a switch to go from receive to transmit,
this powers up the transmitter and mutes the receiver.
There is no sidetone as you monitor the actual signal.
So your tone may vary depending upon how the other station
lines up on you. You can swing the crystal but not from a
front panel knob. This gives the experimenter something
to play with.

I have had to use an oscilloscope to play with this rig
and recommend that everyone have one to check things out
after getting it built.

For what the rig was designed for it fits the bill.
Remember this rig was designed to throw into the glove
box of your car or carry around for emergency communications
thus the derivation of the name.

For a regular in use rig some work will have to be
done as I have mentioned above. It is a good price IMHO.
The 40-9er is gone so we don't have to compare to $25
which would have not been difficult as I am partial to
good superhet receivers. QRP doesn't mean we have to suffer.
:-) Let's not get into flame wars over DC vs superhet.

So a great little rig for experimenting and learning some
new things. But you have to make a decision as to just how

much more you are willing to go in price to upgrade to the
next level of rig.

I know this is just a part of the picture and we will
get the rest of the information filled in as soon as I
finalize the parameters and get the rig back into the
box and on the air.

dit dit
: Chuck Adams (K5FO CP-60) WAS 40m/30m/20m=49/49/50
: EMPS QSOs=2 STATES(w/c)=2/0 DX=0 : MO TN

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: BWHITTEM@mailgw.sanders.lockheed.com
Subject: [2719] mxm emergenciever??????
Message-ID: <26f5b3d0@mailgw.sanders.lockheed.com>

> can anyone give me more info on the emergenciever?
> it sounds like a great accessory to put in my backpack next
> to my compass. i need info like sidetone? freq range? power?
> etc. i need another radio, my wife insisted on building my
> 49er. (i helped)
> thanks
> barry
> wb1edi BSA troop 135 ASM
>
> please reply direct here or to wb1edi@scoot.netis.com (home
> address) as i get the digest and its hard to read sometimes.

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Greg Weinfurtner <weinfurtner@ouvaxa.cats.ohiou.edu>
Subject: [2782] Navaid beacons logged(Delete if not interested)
Message-ID: <v03007800ae955ebd1a45@[132.235.72.11]>

Gang,
     I've got a page with some of the Navaid beacons that I've logged.
They are at:

http://ouvaxa.cats.ohiou.edu/~weinfurtner/navfreq.html

(By Frequency)

http://ouvaxa.cats.ohiou.edu/~weinfurtner/navstat.html

(By Station)

73 de NS8O

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: bcutter@teal.csn.net (Bob Cutter)
Subject: [2743] NDB Station List
Message-ID: <199610241553.JAA17594@lynx.csn.net>

The VLF station test caused be to dig out the VLF converter and I had forgotten what fun it is to log those NDB beacons on 200-400KHz. Is there a site or source to identify those calls on line?

72, Bob KI0G

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: John Carter <carter1@CapAccess.org>
Subject: [2727] Need help with my first antenna
Message-ID: <Pine.SUN.3.91-FP.961024101407.25348B-100000@cap1.capaccess.org>

OK--first question.

I'm planning my first antenna. I'll probably go with a 40m wire dipole fed with coax using a balun. I need something that is not high profile so I'll use thin wire. I saw an article somewhere that recommended using #26 enamelled (sp?) wire.

Is this adequate for antenna building and where do I get it?

What coax should I use and what is a good source for it?

Thanks in advance for you help,

  Jake (KF4MRE)

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Paul Cereste <cereste@myapc.com>
Subject: [2773] Need help with my first antenna -Reply
Message-ID: <s26f8219.023@myapc.com>

I wouldn't use a balun. They are not needed, and they
introduce losses, esp. if u try to load the 40M ant. on 15 M.
Also they aren't "low profile." For coax I like RG-213/U.

>>> John Carter <carter1@CapAccess.org> 10/24/96
09:18am >>>
OK--first question.

I'm planning my first antenna. I'll probably go with a 40m
wire dipole fed with coax using a balun. I need something
that is not high profile so I'll use thin wire. I saw an article
somewhere that recommended using #26 enamelled (sp?)
wire.

Is this adequate for antenna building and where do I get it?

What coax should I use and what is a good source for it?

Thanks in advance for you help,

  Jake (KF4MRE)

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: nskousen@scientech.com (Niel Skousen)
Subject: [2733] Novice Fox rpt
Message-ID: <v02140b00ae952e3aa2aa@[198.60.91.132]>

That was an experience !! My apologies to all who tried and could not get
through. For the first 1/2 hr there were several stations each time I
called, or signed. It was very difficult for me to sort them out, and yet
every time I figured out a call and responded it got quiet and everyone
else let me try to work the contact. it was really neat... except I'm
lousy at sorting the calls out. The other end has got to be h--- for
someone w/ years of experience and 40+ code skills.

Larry East consented to play Elmer come over and 'hold my hand', THANKS

LARRY ! He carefully did not hand me anything, but it was a tremendous help when I was
not quite sure I had the call, or how to handle the repeats and etc.

This was my first real experience with rapid band fading, quick enough to lose letters in. Oh did I mention the Spanish S9 SW-BCI... By 0245z the right coast was gone, by 0300z everything had shut down either from band conditions or from QRM. Found an open spot at 7121, sent QSY about 0310, tried and tried but was not found there. The only station after 0300z was Larry who high tailed it home across town to get the QSO at 0358z... How WA1QVM in held it together to nurse me through to Mass. I don't know. I'm sure there were many who were not able to get through before the band folded, sorry

On the plus side,

Call	RST	<RST.Name.State.Nr/Pwr>			ie his report to me...
W3PNL?	?	?			
W9ZSJ?	?	?			
N6ULU	599	599	Stan	CA	66
W7JDZ	599	599	Mac	ID	1w
N1C?S	?	?			
WA1QVM	448	559	Joel	MA	?
WA6NAE	339	229	Dwight	CA	?
N7CQR	589	559	Dan	OR	502 approx 0245
W6BAB	229	339	Harvey	CA	2w
W1HUE	599	589	Larry	ID	228

Total 5, with a couple of close calls....

Thank you all very much,
its quite an experience, (did I mention the QRM/SW-BCI..)
and I've got a few more chances to practice on all you Elmers out there...

72
Niel

PS CA-2.5 TX-0 sri.. :-)

---------- -.. . .-- .- --... ... .- --------------------
Niel Skousen; S.Eng, SCIENTECH.SPG nskousen@scientech.com
208.525.3742, FAX 529.4721 Idaho Falls ID WA7SSA QRP-L.119
----------DN33wm---

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Gregory J. Buhyoff" <buhyoff@vt.edu>
Subject: [2786] Oops, sorry wrong price on ARK 20 For Sale
Message-ID: <199610242053.QAA01719@sable.cc.vt.edu>

I got my lists mixed up --- The ARK 20 is $175 not $250 !!

this includes shipping via UPS ---

Sorry -- too many unconsolidated lists in front of me -- things being sold
on three different reflectors!

72, Greg KN4FR

Gregory J. Buhyoff
Julian Cheatham Professor
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061

Phone: 540-231-5148

E-mail: Buhyoff@vt.edu

FAX: 540-231-3698

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "William R. Colbert" <v31xe@dzn.com>
Subject: [2807] QRP Symposium notes & pix
Message-ID: <32701AC5.28C0@dzn.com>

Well, I have just spent a very enjoyable couple of hours reading the
notes from Doug, Jim Cates, Chuck Adams, Paul Harden, and others
that participated in the symposium at Pacificon this past weekend.
With the excellent pictures posted to the NORCAL page by Jerry Parker,
I must say it was almost like (not quite but close)being there.
Excellent photos, interesting comments and I want to thank all
involved in posting the comments and pictures. Of course none of
this would not have been possible without the participants -
Thanks to all of you. I hope to attend next year (I hope there
will be a repeat?)and enjoy the sessions first hand.
--
72/73, Ray Colbert, W5XE, SOWP 1064M

(also af852@rgfn.epcc.edu)
El Paso, Texas

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Scottae4vq@aol.com
Subject: [2718] QSL Help
Message-ID: <961024080849_1912927550@emout18.mail.aol.com>

Group:

Does anyone have QSL info for KP3S and K5AM ? Worked them during last QRP contest.
I can't find them in my Hamcall Database.
Please respond direct...

Tnx & 72's   Scott AE4VQ   #418

scottae4vq@aol.com

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Bob Kellogg <ae4ic@nr.infi.net>
Subject: [2756] RF amp Questions
Message-ID: <199610241652.MAA21502@mh004.infi.net>

Gang,

Has anyone saved all of these Daniel Wee questions and answers? I trashed the first few because I didn't know the answers. - And, the answers looked considerabley beyond my experience.

But, as it's developing, this exchange appears to be an excellent primer on design. The question and answer format, sometimes with more than one answer, (the yes, buts) looks like an excellent teaching tool. (not original, I think Socrates suggested the question as a teaching method)

So, If anyone has saved them, (Daniel?), I sure would like to have a copy to study. Part of the challenge of this hobby is that there is plenty to learn!

Thanks.

CUL,
Bob Kellogg, AE4IC

Prolably, but not nececelery. - Benny Hill

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Richard Fisher <ki6sn@pe.net>
Subject: [2737] Spartan Sprint Time Warp
Message-ID: <Pine.GSO.3.95.961024081408.21107B-100000@victoria>

On the way to the airport before leaving on his trek to the other side of the planet, Russ Carpenter, AA7QU and Adventure Radio Society Head Honcho, called in a panic. "The post I sent you about the November Spartan Sprint has Daytlight times listed," he said. "And in November we'll be back on Standard Time. Would you please change the post to Standard before sending it to QRP-L?" "Sure, Russ," I said. Then promptly forgot to do it. Apologies to Russ and to you all.

Here are the times for the November 4 Adventure Radio Society Spartan Sprint:

Start at: 9 p.m. EST, 8 p.m. CST, 7 p.m. MST, 6 p.m. PST
End at: 11 p.m. EST, 10 p.m. CST, 9 p.m. MST, 8 p.m. PST

Thanks to all who kindly (and gently) pointed out my dumb misteak. Hope to see you on Sprint night.

Vy 72,

Richard Fisher, KI6SN
ARS No. 3

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Dquagliana@aol.com
Subject: [2801] Special event station W2P/QRP Saturday morning
Message-ID: <961024184802_1514956887@emout15.mail.aol.com>

   This Saturday October 26th the Piscataway Amateur Radio Club will activate special event station W2P to celebrate the 330th anniversary of the founding of the town of Piscataway. On Saturday morning I will be active using W2P/QRP on or near 7040. I hope to be active from around 10:00am to about 11:30am. I'll

be using the SW-40 and either the magmount on the car or the
40m dipole if I can put it up.

I *might* be able to activate W2P on 20m but I'm not sure. Other
club members will be using W2P at non-QRP levels, so listen for
the /QRP.   Other club members will be active as W2P starting
Friday at 8:00 P.M. Certificate QSLs will be issued.

W2P (not necessary QRP) will also be active on AO-27 on
the 1130 am pass.

Doug KA2UPW
dquagliana@aol.com
Satellite/QRP/Mobile <-- all at the same time.

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: David.Reid@asml.nl (David Reid)
Subject: [2715] Specifications of the Micro-Beacon
Message-ID: <199610240852.KAA14221@wspub002.asml.nl>

X-Sun-Data-Type: text
X-Sun-Data-Description: text
X-Sun-Data-Name: text
X-Sun-Charset: us-ascii
X-Sun-Content-Lines: 9

Hi guys,

attached is the HTML page which will be updating my WWW page soon.

Just thought the info would be useful to you... if you are interested in
putting a beacon on the air....

Dave - PA/G0BZF
GQRP 3677.

X-Sun-Data-Type: default-app
X-Sun-Data-Name: beacon.htm
X-Sun-Charset: us-ascii
X-Sun-Content-Lines: 101

<!-- Generated by the Home Page Wizard -- CompuServe Inc. -- Last Updated : Oct
21, 1996 11:49 ->

<html>

```
<!-- The following HTML tags are the header and title tags.  These tags allows you
to specify a title for this page. -->
<head><title>beacon</title></head>

<!-- The following HTML tag is the body tag.  This defines the body portion of
this page or document. -->
<body bgcolor="#000040" text="#ffffff" link="#80ff00" vlink="#ff0000 vlink=">

<!-- The following is an HTML horizontal rule tag (or line). -->
<hr align=center width=90% size=10>

<!-- The following is an HTML headline tag.  Values for this tag range from H1
(largest) to H6 (smallest). -->
<center><h1>D.R.Computer Products</h1></center>

<center><h2>NEW PRODUCT (20/10/96)</h2></center>

<!-- The following HTML is just plain text. -->
<p><center><pre>
  |                  |
  |                  |
  |                  |
  |                  |
  |                  |
  |                  |
  |                  |
  |                  |
  |                  |
  |                  |</pre></center></p>

<center><h2>The Micro-Beacon</h2></center>

<hr align=center width=90% size=3>

<p><pre>This is one of our NEW PRODUCTS

( it is so new that there is no picture ready yet!)

The Micro-Beacor is aimed at those of you who
want to activate a beacon on the air.
This little project is based on our other kits in the
Micro-Kit range - it sends a continuous message
followed by a 10 second key-down then repeats
the message ad infinitum. (or until the battery runs
out which will be a very long time as it only uses
2mA to drive the keying transistor.

There are 2 versions of the Micro-Beacon:</pre></p>
```

```
<h3>            HF version</h3>

<p><pre>This version sends your message followed
by a 10 seconsd key-down then repeats.
Your message can be up to 250 characters
long and can include all the special characters
such as AR or BT.                                                    </pre></p>

<h3>           VHF version</h3>

<p><pre>This version sends your message followed
by a 10 second key-down, then it sends your
message at Meteor-Scatter speeds (800 LPM)
Then the key-down again and repeats the loop.</pre></p>

<hr  width=60% size=3>

<p><pre>Both versions support messages of up to 250
characters, choice of normal sending speed
(from 5 WPM to 50 WPM) (Default is 10 WPM)
They can be bought in Kit version with all PCB
mounted components... or as a programmed
chip - which you can build into your own circuit.

Both versions come complete with instructions
and full circuit diagrams

The estimated price for the chip only version will
be 8 UK Pounds (Sterling) and the kit prices will
be under 15 UK Pounds.

The PCB in the kit is the same one used for our
other Micro-Kits - one square inch (25.4 mm sq)
See the Micro-Keyer for a photo of the size.</pre></p>

<!-- The following HTML tag is the internal link tag.  This is a hot link to
another page in your project. -->
<br><center><UL><LI><a href="keyer.htm">More on the Micro-Keyer</a></UL></center>

<br><center><UL><LI><a href="dfkeyer.htm">More on the Micro-DFKeyer</a></UL></
center>

<br><center><UL><LI><a href="tutor.htm">More on the Micro-Tutor</a></UL></center>

<br><center><UL><LI><a href="ordering.htm">Ordering Information</a></UL></center>

<hr align=center width=90% size=3>
```


<UL><LI>Back to HomePage</UL>

<hr align=center width=90% size=3>

</body>
</html>

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: torell@sicom.com (Kent Torell)
Subject: [2802] SS Contest, one year later...
Message-ID: <v02130500ae95a1874d09@[192.91.202.41]>

The SS contest last year was my re-entry into CW hamming. I made a little 300 mW 40 meter rig, and had almost no success getting anyone to answer back to me. I reasoned that everyone would want to talk to me during SS, and sure enough :-) I made 7 contacts! I was really thrilled; tripled my lifetime contacts in one day! Stayed in the -slow- speed areas. Now I have my extra, and a lot more confidence (arrogance?), so I'll shoot for 100 contacts.

So, all you timid lurkers out there (I know you're there, 'cuz I was one ;-) now is the time to jump into the water! Life is good....

72, ab7oa (looking to triple my lifetime contacts again this November)

Kent Torell   torell@sicom.com   602-483-2867 x230
SICOM   7585 E. Redfield, #202   Scottsdale, AZ   85260
AB7OA qrp-l 57   ARCI 9075   DM33xn 33.55 N 111.078 W

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: jim hale <kj5tf@mctc.com>
Subject: [2771] Super 49er parts Correction!
Message-ID: <326FD42F.1861@mctc.com>

Gezzzz - I knew I would do something like this, I ment to say 0.1uF not .1pF ! Sorry about that mistake.
Thanks to Roger KE6PPI for seeing that, 72/3'z de Jim

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: ji3m@scubed.com (James R. Duffey)
Subject: [2726] Sweepstakes Hints
Message-ID: <v02130507ae9527cfea8b@[192.31.66.229]>

Chucks comments on Sweepstakes are good. I would like to add a couple of hints.

1. I have found the highest band open to give the best results (highest QSO rate) with low power in Sweepstakes. Presumably this is due to decreased absorption in the ionosphere. Beware though, of how easy it is to fall into a trap of "riding the MUF" and missing nearby multipliers. I did this two years ago when 20 was open late into the evening by sporadic E and I was working them right and left. By the time I went to 80 and 40 the skip was too long to get some nearby multipliers (I missed Colorado, Utah and Arizonia!).

2. Have a plan. You don't have to stick to it, but it helps to envision how things will go. I like to start out on the highest band open, and QSY down as the MUF drops. The key is to QSY before the band completely dies and makes the next lower one very crowded. A propagation progrma will tell you these things. I usually plan to work 80 and 40 on Sunday morning to pick up close in multipliers, but in the western US you will need to be on a high band early in the morning to catch KP4. I take the 6 hour break in the early morning, waking up before sunrise to catch some predawn long skip. I have not developed a better strategy for napping.

3. Maximize your operation according to your station capabilities. As an example, if you are better equipped for 40 than 20, get down to 40 in the afternoon while 20 is still open.

4. Use a propagation program to determine what the best time and band to get rare multipliers is. I usually run Hawaii, Alaska, Northwest Territories, and Puerto Rico as a minimum. The results may surprise you. Two years ago the study said Sunday AM on 10 M was the best time for Puerto Rico. I went up there and the band was dead except for some weak signals. One was a KP4 which I worked for a difficult multiplier. I also got Hawaii this way, but Alaska and the NWT escaped me.

5. The upper edges of CW activity in the band are usually slower, less populated, and also can support CQing by QRP stations.

6. The Novice bands are often fruitful grounds for contacts. There are novices who want to participate, but activity on the Novice bands is spotty. The ones who are there are have usually worked everybody else on the limited space they have available and are grateful for the contact. They will pounce on any new activity that appears.

7. Sunday afternoon is a good time for CQing by the little guns. The big guns have worked the band out and are looking for new stations to work.

8. Keep a dupe sheet (or computer equivalent) even if you think you are only going to work a few stations. These things have a habit of snowballing.

9. Set a goal. This year I want to beat last years high NM QRP score by AB5OU of 280. I post a graph like of contacts as a function of time to track this. If you arte just starting out set your goals lower so you don't get discouraged. Enough contacts for a pin, 100?, is a good goal for a beginner.

10. Take a 5 minute break every couple of hours or so. A short walk outside is particularly refreshing.

11. Don't put up a new antenna on the day of Sweepstakes. This will cost you 3 hours and 47 minutes of valuable contest time when the high bands are open. They will not be open as well the next day. Voice of experience. The antenna works nice though.

12. Make sure that everything that requires a battery; keyers, filters, clocks and ?? have fresh batteries. Set your clock to WWV before starting the contest.

13. Have lots of sharpened pencils, several mechanical pencils or several pens handy. I use the BIC disposable mechanical pencils which work fine.

If you want to improve your station now is the time to put your antenna up higher, replace that RG58 with RG213, buy that memory keyer, and put those narrow filters in the rig. Don't wait until the week before SS.

Good luck. Listen for me. - Duffey KK6MC/5

James R. Duffey
Principal Scientist
Maxwell Technologies Incorporated/Federal Division
Suite 300
2501 Yale Blvd SE
Albuquqerque, NM 87106

(505) 764-3143
(505) 843-7995 (FAX)

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Scottae4vq@aol.com
Subject: [2815] Thanks !
Message-ID: <961024232217_1381402823@emout18.mail.aol.com>

Thanks to all who responded to my plea for QSL help...
I've added appropriate web pages to my "favorites list" !!!

72's... Scott AE4VQ

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
Subject: [2717] Transistor amplifier design
Message-ID: <326f572f.pandora@pandora.lugs.org.sg>

Hi,

Okay, I think I am going to try to design an amplifier on paper. This will be a simple Class A amplifier with no feedback (like the one I posted recently).

Desired output is 430 mW
Output load is the 7.5 ohm of the base of an MRF475
Base bias network sets base voltage at 2.8V
Vcc is 12.8V
Transistor is a 2N5109, B(ac) = 85

So:-

Vb = 2.8V
Ve = Vb - 0.7 = 2.1V
Ic = 60 mA (arbitrary)
Ie = Ic (approx)
Ib = Ie / B(ac) = 0.7 mA
Rin = 25 * B(ac) / Ie = 33 ohms
Re = Ve / Ie = 35 ohms (emitter resistor)
Vin = Ib * Rin = 25 mV (signal voltage)
Rl = Pout / Ic^2 = 119 ohms (load impedance)
Pmax = (Vcc - Ve) * Ic = 642 mW
Pout = Ic^2 * Rl = 430 ohms
Pin = Ib^2 * Rin = 0.016 mW (input power)
Gpe = 10 log(Pout/Pin) = 44 dB!

Since output looks into a 7.5 ohm load, a 16:1 transformer will be needed to transform the 7.5 ohms to 119 ohms.

Is this approximately correct? Looks like the 2N5109 with the B(ac) of 85 is capable of a lot of gain. I probably won't use it but I just want to know if this is about correct? Thanks.

73 de 9V1ZV Daniel

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*------------+--------------------------------------+
Daniel Wee	daniel@pandora.lugs.org.sg
9V1ZV	danwee@singnet.com.sg
QRP-L #667	daniel.wee@f516.n600.z6.fidonet.org
+------------+--------------------------------------+

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
Subject: [2757] Transistor performance
Message-ID: <326fa96f.pandora@pandora.lugs.org.sg>

Hi Gang,

I've been doing some real world testing of transistor performance. Here's what I found, briefly:-

Hottest	2N4427
	2N5109
	2N3866
	2N3904
	2N3553

* Hottest does NOT refer to temperature but power gain :-) Just in case.

These were tested in a Class A circuit, completely bypassed emitter, driver amplifier. The 2N4427 may be a little TOO "hot" though, and parasitic oscillations may occur. It is only marginally better than the 2N5109 but it rated for a higher power handling. The 2N5109 on the other hand,, seems less prone to oscillations even after taking into consideration its marginally lesser power gain. The 2N3904 was okay but the 2N3553 was way down.

This information is presented just in case someone may be wanting to select a driver transistor. I know this is all pretty subjective but there is not point in giving specific Gpe unless other qualifying parameters are provided as well. If anyone really needs those, I suppose I can try. (The real reason is my laziness :-))

Have fun.

73 de 9V1ZV Daniel
--
*------------+--------------------------------------+
Daniel Wee	daniel@pandora.lugs.org.sg
9V1ZV	danwee@singnet.com.sg
QRP-L #667	daniel.wee@f516.n600.z6.fidonet.org
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From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Chris J. Cartwright - ELF" <dsc3cjc@imc220.med.navy.mil>
Subject: [2759] Tree Fishin'
Message-ID: <Pine.3.89.9610241353.A647-0100000@imc220>

With the recent antenna inquiries I thought the following might be useful.

I've seen the slingshot and fishing reel method written about or
mentioned several times and always thought, "Yeah, nice idea". Last
night I stopped by my local Sports Authority and picked up a wrist rocket
type sling shot, a Zebco 202 reel and some sinkers, total damages $13.
If I'd have known it were that inexspensive I'd have saved myself a lot
of time and frustration much, much sooner.

If you haven't seen this setup it is the BEST thing short of a helicopter
for getting wires in trees. (I'm sure to take heat on that one) Takes a
little practice (very little) and easily gets over the 75' oaks out back.
Got dark on me last night before I got done "practicing" but I'll be back
there again tonight.

P.S. Anyone know what the terminal velocity for the average acorn is?
     Umm... no reason, just askin'

72 de N3XRV aka Lumpy :)

-- Chris Cartwright N3XRV Gaithersburg, MD | dsc3cjc@imc220.med.navy.mil --
-- EMPS QSOs=0 STATES(w/c)=0/0 DX=0 FOX=0 | QRP-L #655   QRP-ARCI #9271 --

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: doster@umr.edu (George Doster)
Subject: [2747] Update on my doings
Message-ID: <199610241612.LAA29309@hermes.cc.umr.edu>

        Someone a while back suggested that we peroidically post whats up in

our neck of the woods. Well here I go.

We got a cold snap tues. so I decided to get that parallel dipole up. It's been laying in the yard for about 3 weeks. Attached the center to the peak of the back (north) side of the house, maybe 25-28ft high. Strected out the legs and attached them to a small tree and a convient fence post. OK so the center is at 25ft and the ends of the 80m legs are about 3ft off the ground. Not great but it's better than a dummy load! The 40m legs are about 10ft off the ground. Man that wind is cold. Run inside, fire up the TS-520S, wait for tubes to warm up. Weather channel says the wind chill is below freezing. I'm not ready for this. Find coat, hat, and gloves. Ah tubes are warm. Put the dial on 7.110. Tune up. hmmm. Check SWR BIG NUMBER to 1. Rats. Check around 7.500... 1.5:1 -- Man too short!! OK maybe 80m is better 3.700 --- 2:1. 3.600 1:1 hmm shorten the 80m by about 20in and lengthen the 40m leg by about 2ft. It's not dark yet!! (The XYL (N0RRT) asks "What are you doing?!" reply "Uhmm, making sure the north storm window are on properly" as I quickly put the wire cutters and roll of copper behind my back and smile big. She mumbles something about being a "radio widow". Have to makeup later. Right now RUN!) OK cut the 80m. done! splice on 2ft to the 40m legs. Add 2 extra inches just in case! done! Wow that only took an hour and a half. Cold! Dark! Flashlight dim! back to the house. Get to the shack before XYL see me. Made it! Rig on, CHECK!. Tuned up on 3.700, CHECK! SWR? 1.1:1 YESSSSS!. Less than 1.8:1 over all novice band, YESSS!!!. 40m - 7.110 SWR? 1.1:1 oh yeah! dance a jig, solo high five, etc. Now were's my key?? UH OH I have no key! Sit in chair, face in hands. Oh well at least the XYL will be glad "that tangled wire mess in the fornt yard" has disapeared. Until she looks out back at least. Now were is a good resturant to begin the resistution process? hmm, need a baby sitter too. Well I think I can make a keyer from scraps around work. ya that'll work. Let's see, a piece of plexi, some aluminum, ...

Tune in next time for the story about the key and how the night out went!

Jay

George Jay Doster doster@umr.edu N0PMY
Cloud and Aerosol Sciences Laboratory
Univ. of Missouri - Rolla

QRP-L #739

Disclaimer: All spelling mistakes are my own and not Webster's.

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996

From: "Ahrens Tim" <tahrens@devmail.sps.mot.com>
Subject: [2792] VE3SP, VE7SL, KE4KT,KK6MC
Message-ID: <9609248462.AA846204699@devmail.sps.mot.com>

Hi folks - could you send me your addresses? I'm
putting the QSLs for the Fox hunt together, and
got bogus stuff/no addresses.

Thanks,

Tim WA5VQK

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: DEk@gnn.com (David Ek)
Subject: [2720] Vertical multiband antennas and loops
Message-ID: <199610241218.IAA19640@mail-e2b.gnn.com>

Question for all you knowledgeable QRP'ers:

How well do the vertical multiband antennas (like those sold by GAP, MFJ, Radio Shack, etc) work for QRP? I'd originally planned to put up a half-wave dipole but I'm having trouble coming up with a decent place to put one. My roof isn't big enough for anything but an inverted vee with about 45 deg between the two sides, and that's the only place high-enough to be effective and out-of-the-way. I can put a vertical up at about 30 ft or so.

I also read with interest the article on the 30 - 80 m loop in October's Amateur Radio Today. Anybody else see that? What do you think?

Dave Ek -- KB0YSN
dek@gnn.com

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Vic Rosenthal <rakefet@rakefet.com>
Subject: [2796] Wattmeter question
Message-ID: <326FE7DC.53F2@rakefet.com>

Hi Qr-people,

I have an MFJ wattmeter that has 0-300 and 0-30 watt ranges. On the high range (or on the low range with higher power) it seems to work correctly. But on the low range with 5w output, I always get 0 reflected power. I presume this is because the diodes are nonlinear (or something). Can anyone suggest a fix (perhaps different diodes)? I don't need a precision wattmeter, but I do want to be able to check SWR at QRP levels.

Vic K2VCO

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Bill Myers <bmyers@destin.nfds.net>
Subject: [2795] What the codes on Cap's mean?????
Message-ID: <1.5.4.16.19961024165650.1b573970@destin.nfds.net>

Help!!!

I been outta the building arena for a while. I'm getting back into it again.

I would like to get a good reference book on capacitors, especially something that can decode all the numbers so I know what I got.

I aquired a grab bag of caps and I'm not sure what value they are.

The 104Z's I believe are .1mfd.

I know the .01z/p/u are probably .01mfd.

What about the 5.6c/npo, 100m, 560k (is this one like a resistor?), 473z.

And I got some really funny ones with W125
L22
8525
Veco

Any help would be appreciated...

72/73

--
Bill Myers   KK4KF FISTS #2390 QRP-L #755 ARRL
Snail Mail   P. O. Box 178
Shalimar, FL 32579-0178
Grid   EM60rk

e-mail   <bmyers@destin.nfds.net>
homepage http://destin.nfds.net/~bmyers/
CHECK OUT THE FISTS INTERNATIONAL CW CLUB HOMEPAGE
http://n9nvv.qrp.com/~fists
       ^^^^^ That's N 9 N V V

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
Subject: [2734] Who to believe, Pout?
Message-ID: <326f8497.pandora@pandora.lugs.org.sg>

Hi Gang,

     Here's another brain teaser:-

I am measuring a signal fed into SWR and Power meter (good to 150 MHz). On the meter, this CW signal reads about 3.7 watts or so. The output of the meter is connected to a 51 ohm dummy load. Simultaneously I am looking at the waveform on a high frequency scope and X10 probe, both rated to 150 MHz. On the scope, I see a clean sine wave, with a peak to peak voltage of 44.2 volts (scope has measurement features).

Now, the power output would be given by:-

     Pout = Vrms * Vrms / R

and

     Vrms = Vp-p / 2 * sqrt(2) = 15.63 volts

thus

     Pout = 15.63 * 15.63 / 51 = 4.8 watts (approx)

by contrast, a 3.7 watts output should be giving me a 38.8 volts peak to peak waveform.

So now, the scope says 4.8 watts and the meter says 3.8 watts. Question, who do I believe? Are my calculations correct? Did I miss out something, or added something which should not be there? Which would you believe, the scope or the meter?

73 de 9V1ZV Daniel
--
*------------+---------------------------------------+

Daniel Wee	daniel@pandora.lugs.org.sg
9V1ZV	danwee@singnet.com.sg
QRP-L #667	daniel.wee@f516.n600.z6.fidonet.org
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From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Laura" <sputnik@imt.net>
Subject: [2750] YL Voice on SSB
Message-ID: <199610241529.JAA28645@cu.comp-unltd.com>

Hi!

No doubt about it...my YL voice has broken through many a pile up on SSB. I never run more than 100 watts, so the big guns usually get it first...but through the muck I am usually able to make the contact. I know that the other hams here tell me a YL voice is an advantage, and I would have to agree!

73 de KJ7UN
Laura
sputnik@imt.net
QRP-L #790

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: k5zty@hamgate2.w5-f6cnb.ampr.org
Subject: [2813] YS1ZRB QSL route??
Message-ID: <20898@sugarland.ampr.org>

I can't find YS1ZRB listed in any of the DX data bases, his call must be fairly new. I have worked him in the last couple of contests and would like to send him a card. Does anyone know what his address is?
Thanks for your help,
72,
Bill, K5ZTY
ARCI #8817 NORCAL #1321 CQC #178 MI #1472 NE #440 QRP-L #473
WITHOUT CW, IT'S JUST CB

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Floyd Soo, KF8AT" <hires@rust.net>
Subject: [2748] [Fwd: Female voice and SSB success]
Message-ID: <326FC150.7365@rust.net>

This is a multi-part message in MIME format.

--------------64C4789D304F
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

No doubt about it! We have found the same thing at our USECA Field Days!
YLs on phone definitely get more and faster replies; for what ever
reason!

72,
Floyd, KF8AT
QRP-L #392

--------------64C4789D304F
Content-Type: message/rfc822
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

Received: from fidoii.CC.Lehigh.EDU (fidoii.CC.Lehigh.EDU [128.180.1.4])
          by Fe3.rust.net (8.8.2/8.8.0) with ESMTP id MAA21316
          for <hires@rust.net>; Thu, 24 Oct 1996 12:06:22 -0400 (EDT)
Received: from Lehigh.EDU ([127.0.0.1]) by fidoii.cc.lehigh.edu with SMTP id
<35342-19084>; Thu, 24 Oct 1996 12:06:40 -0400
Received: from nss2.CC.Lehigh.EDU ([128.180.1.26]) by fidoii.cc.lehigh.edu with
ESMTP id <35169-19084>; Thu, 24 Oct 1996 12:05:17 -0400
Received: from w3eax.umd.edu (w3eax.umd.edu [128.8.198.73]) by nss2.CC.Lehigh.EDU
(8.8.2/8.8.2) with SMTP id MAA193729 for <qrp-l@lehigh.edu>; Thu, 24 Oct 1996
12:05:02 -0400
Received: (from ham@localhost) by w3eax.umd.edu (8.6.12/8.6.12) id KAA14305; Thu,
24 Oct 1996 10:47:54 +1030
Message-Id: <Pine.3.89.9610241040.D14150-0100000@w3eax.umd.edu>
From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Steve Hideg <Steve.Hideg.1@nd.edu>
Subject: [2721] Re: <KN> addressed station only
Message-ID: <v0300780bae95126614b2@[129.74.35.16]>

>I had a "Who's On First" CW QSO last night. I forgot what
>-.--. means so I asked in Morse code,
>
>   what is the meaning of -.--.
>
>The guy answers,
>
>   what is the meaning of what?
>
>I tried again - same results. Went and looked it up in a
>book and realized there are some questions that one just

>shouldn't ask in Morse code. :-)
>
>73, Cecil, W6RCA, OOTC (not speaking for my employer)

That reminds me of the problems one might encounter with a 1X2 (or 2x2)
call ending in a "k" trying to check into a traffic net:

KF8YK: "DE KF8YK"
  NCS: "KF8Y"
KF8YK: "KF8YK"
  NCS: "KF8Y?"
KF8YK: "KF8YK K"
etc.

Your scenario is like a reserved word or character in a programming
language. I guess one would need to develop an "escape" mechanism to talk
about prosigns like they do in programming languages.

Cute story.

:-)

73!

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: lhalliday@creo.bc.ca (laura halliday)
Subject: [2798] Re: AD811 in a transmitter - what's the point really?
Message-ID: <199610242217.PAA22429@BC.net>

Dana KK6JQ wrote:

> A little reality check...

> I'm probably the last person that would ever discourage someone from
> doing something "just because", but I question the real point in
> building a 1W CW transmitter using a $9 op-amp in addition to an RF
> transistor.

> (snip...)

> I think it would be more interesting to find an application where
> this IC brings some singular advantage, rather than proving the
> wheel can be re-invented yet another time...

As long as the notion of using an op amp for an RF-ish application gets people thinking about other things they might do with it, I'm all for it! I can think of two things I'd try with a really fast op amp right off the bat - gyrator circuits at other than VLF, and all-pass filters for RF phase shifting. I remember once seeing a circuit that used a Gingell polyphase network (normally used at audio) for RF phase shifting - cool!

On a different note, I'd like to thank everybody for their thoughtful comments about the role of women in ham radio. That there are issues is clear, but this group seems to understand this. However, I've found QRP folks to be unusually accepting and forward thinking anyway. Not to mention technically minded. So thanks to the list for your indulgence; we now return to your regularly scheduled QRP-L.

I've got a lot of personal email on the subject to wade through, so please don't feel rebuffed if I don't get back to you immediately (a couple of messages in particular come to mind...). Being out of town can raise hell with email too - Philadelphia (business), Montreal (hanging out), and Tucson (AMSAT), all in the next couple of weeks...

Laura Halliday VE7LDH
lhalliday@creo.com
ve7ldh@amsat.org
Locator: CN89mg

"C'est une femme mutine, assez
elegante, grave et legere, ayant le
sens du confort et du plaisir
en tout." - C. Deneuve

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Dan Hogan <dhhogan@lightside.com>
Subject: [2809] Re: AD811 in a transmitter - what's the point really?
Message-ID: <199610250053.RAA09626@covina.lightside.com>

Dana,

No flame from me. I'm still wondering about stuffing projects into as small a container as one can find. All though I have an Altoids tin, given to me by a generous List member, that I'm going to stuff with a 49er. But I like lots of room in my projects and room for tinkering.
73
Dan Hogan WA6PBY QRP-L #558, CQC #340, NorCal #1806, ARRL

dhhogan@lightside.com   Lat. 34d 03.5'N Lon. 117d 56.0'W
  Grid: OM84wc

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Joe Gervais <vole@primenet.com>
Subject: [2774] Re: Beginner wants to put something together
Message-ID: <199610241935.MAA07249@primenet.com>

Jack (Callsign soon to be here) wrote:
>
> So I want something I can put together and listen to the amateur
> bands. Something that I can listen to slow code on. :-) Perhaps even
...
> But it can't be difficult to build, or else it'll waste my time and
> money, and perhaps add to the injuries...

Hmmmm. A cheap and reasonable way to go may be a 49'er. Very
basic, but adequate for what you need. Does anyone know if
the 49'er goes together easily for beginners?

Also, as mentioned by Laura and others, the Ten-Tec rcvr kits
look like a good deal. I imagine they're good quality for the
money.

Of course until you get it built, there may be a few Elmers in
your neck of the woods willing to loan you a rig. May even be a
few locals who subscribe to the List.... <nudge nudge> ;-)

Please keep us posted!

Cheers de KC7NEV,

-Joe, vole@primenet.com, AZ ScQRPions

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [2768] Re: Beginner wants to put something together.
Message-ID: <Roam.3.0.1.846181362.10003.myers@bigboy>

> I don't yet have my license. I know half the code and expect to pass
> at least the 5wpm test when I get around to taking the test for Tech
> Plus.

>
> I like tinkering. I'm not gifted -- of the past three radio receivers
> I've attempted to construct in the past five years, one drew blood
> (sharp metal) and another caused an interesting burn on my hand from a
> soldering iron. But I try. The third one was a really lame
> spring-and-wire sort of thing.
>
> So I want something I can put together and listen to the amateur
> bands. Something that I can listen to slow code on. :-) Perhaps even
> plug into the line-in of my soundblaster, and teach the computer morse
> code (I'm much better at coding than building) or something.
>
> But it can't be difficult to build, or else it'll waste my time and
> money, and perhaps add to the injuries...

I'd suggest either the Ten Tec or Ramsey shortwave CW receivers. I
haven't seen the Ten Tec kit but I suspect it is better than the
Ramsey kit.

Dana KK6JQ
Dana@Source.Net

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Laura" <sputnik@imt.net>
Subject: [2769] Re: Beginner wants to put something together.
Message-ID: <199610241724.LAA07339@cu.comp-unltd.com>

I suggest that, for your money, why not build a small QRP rig so that you
can listen now, and be able to use it for sending later? Seems like a plan
to me. Check QST or CQ or keep checking this list for QRP kits.

73 de KJ7UN
Laura

sputnik@imt.net
QRP-L # 790

>
> > I don't yet have my license. I know half the code and expect to pass
> > at least the 5wpm test when I get around to taking the test for Tech
> > Plus.
> >
> > I like tinkering. I'm not gifted -- of the past three radio receivers
> > I've attempted to construct in the past five years, one drew blood

> > (sharp metal) and another caused an interesting burn on my hand from a
> > soldering iron. But I try. The third one was a really lame
> > spring-and-wire sort of thing.
> >
> > So I want something I can put together and listen to the amateur
> > bands. Something that I can listen to slow code on. :-) Perhaps even
> > plug into the line-in of my soundblaster, and teach the computer morse
> > code (I'm much better at coding than building) or something.
> >
> > But it can't be difficult to build, or else it'll waste my time and
> > money, and perhaps add to the injuries...
>
>>

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: wb8ygg@juno.com (Bradley S. Mitchell)
Subject: [2784] Re: Beginner wants to put something together.
Message-ID: <19961023.144842.2615.0.WB8YGG@juno.com>

I would seriously 100% recommend the SUDDEN Rx.

     Bill Kelsey sells them, or at least I think does, and
they are a marvelous Direct conversion receiver.
This is probably the Simplest Ham band receiver out there.
Also, 624 may be selling the Neophyte. This receiver
is very similar to the Sudden.

     Now anybody have Bill's E-mail ?

     73 Brad WB8YGG

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>
Subject: [2789] Re: Beginner wants to put something together.
Message-ID: <Pine.OSF.3.95.961024151241.678A-100000@duke.usask.ca>

If I am not mistaken Kanga sells them. Kanga can be found from the
Norcal web site. If you cant' find the Norcal web site you can start
with my home page http://duke.usask.ca/~buydens/ham

Brian.

On Wed, 23 Oct 1996, Bradley S. Mitchell wrote:

> I would seriously 100% recommend the SUDDEN Rx.
>
>   Bill Kelsey sells them, or at least I think does, and
> they are a marvelous Direct conversion receiver.
> This is probably the Simplest Ham band receiver out there.
> Also, 624 may be selling the Neophyte. This receiver
> is very similar to the Sudden.
>
>   Now anybody have Bill's E-mail ?
>
>   73 Brad WB8YGG
>
>
>
>
>
>

+---+
| Brian Buydens, Computing Services, University of Saskatchewan |
| email: Brian.Buydens@usask.ca |
| VE5RDV |
+---+
| The grand leap of the whale up the Fall of Niagara is esteemed, by all |
| who have seen it, as one of the finest spectacles in nature. |
| -- Benjamin Franklin. |
+---+

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Laura" <sputnik@imt.net>
Subject: [2728] Re: CQWW QRP
Message-ID: <199610241310.HAA18046@cu.comp-unltd.com>

Dear David:

     Most of the US is in Zone 4 for the CQ Zones. It appears to me that Dallas would be Zone 4 as well. Zone 4 covers most of the middle of the US, Zone 3 to the west coast and zone 5 on the east coast. There is a map in the ARRL Operating Manual in the "referenes secion".Page 17-57 in the Fourth Edition. I'll be working it too! Hope to work you!

73 de KJ7UN
Laura

> From: David Kreinberg <kreinbd@ccgate.dl.nec.com>
> To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
> Subject: CQWW QRP
> Date: Thursday, October 24, 1996 7:31
>
>
>   Gang:
>
>   I plan on working this weekend's CQWW contest QRP-style
>   from the home QTH.
>
>   This will be a two-fold exercise:
>   1. To get in the upcoming SS contest mode
>   2. To use a computer-based logging program (CT) for the
>   first time!!
>
>   My question is simple and silly, but important. What is
>   our (my) zone for the exchange? Is the US just one zone,
>   or does Dallas, TX have its own zone?
>
>   Thanks for your help. Good Luck to you all in the exciting
>   contest season ahead!
>
>   73 de Dave AC5GY Dallas, TX
>
>

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: wb2vuo@juno.com (William K Hibbert)
Subject: [2714] RE: Cutting Coax Braid
Message-ID: <19961023.212817.4727.1.wb2vuo@juno.com>

If NOT cutting the braid is your aim, then the best item I have found is Nylon button thread. I take a length of it (about 9"), tied off between two short lengths of 1/4" dowel stock. The thread is then wrapped around the coax in a single loop, and sawed back & forth. It slides right through the vinyl jacket, but doesn't cut the braid, leaving a nice clean (slightly tapered) end on the jacket.

>From this point, you can use whatever method you normally do for separating the braid, etc...

BTW: Nail clippers cut the fine wires in the braid cleanly, leaving no
'Frog's Hairs' to cause SO much fun in troubleshooting at a later
time...

72/73, Keith, WB2VUO, QRP-L #582
Trustee, KB2YTW/B 10 Mtr Milliwatting Beacon (250 mW @ 28.2870 MHz)
"In the Depths of the Great Bergen Swamp...FN13ac"

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Chris J. Cartwright - ELF" <dsc3cjc@imc220.med.navy.mil>
Subject: [2732] Re: DX last nite; List variety good
Message-ID: <Pine.3.89.9610241041.A647-0100000@imc220>

On Thu, 24 Oct 1996, Roy Boggs wrote:

> pileup; going south, Aruba (1) and Neth. Antilles (2 stations) were equally
> strong and again, with big loud QRO pileups. I am amazed how these ops can
> pull 5 puny watts out of all those gangbuster sigs. Of course it took 3-4

I've notice both of these areas on 10m phone (quessing QRO) coming in
like gangbusters here in MD between 0700 and 0800Z. This is during my
drive home so it may start earlier. Three days this week they seemed
just stop at 0800, one minute they're running six stations a minute, the
minute hand goes straight up, and then nothing.

Just curious what was going on. Contest? DXpeditions? Co-incindence?

72/73

-- Chris Cartwright N3XRV Gaithersburg, MD | dsc3cjc@imc220.med.navy.mil --
-- EMPS QSOs=0 STATES(w/c)=0/0 DX=0 FOX=0 | QRP-L #655   QRP-ARCI #9271 --

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Bob Hightower <ki7mn@dancris.com>
Subject: [2736] RE: Female hams
Message-ID: <199610241535.IAA28807@dancris.com>

>Date: Wed, 23 Oct 1996 14:39:26
>To: myers@bigboy.West.Sun.COM
>From: Bob Hightower <ki7mn@dancris.com>
>Subject: RE: Female hams
>

>At 02:28 PM 10/23/96 -0700, you wrote:
>>
>>While you yourself may not have a problem with the idea of women
>>in amateur radio, I've certainly seen evidence of sexism in radio
>>amateurs. Claiming it doesn't exist won't make it go away. The
>>sexism is often unintentional, but it exists.
>>
>Isn't it funny, though, how this goes away during major contests? When my
xyl works one with me she really rakes in the contacts...as do others. Seems
that 'most' hams respond to a female voice quicker. Maybe that IS sexist,
but it works.
>

As usual, forgot to copy the list.
73,
Bob KI7MN NorCal 1221   ARCI 8918 Qrp-l 271 CQC 274 ARRL (Not in any
order of importance!)

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Kevin Muenzler <wb5rue@amsat.org>
Subject: [2752] RE: Female hams
Message-ID: <01IB0Q85R84EBHCR00@ARWEN.UTHSCSA.EDU>

On Wednesday, October 23, 1996 8:08 PM, Bruce
Robertson[SMTP:brucerob@chass.utoronto.ca] wrote:
>On Wed, 23 Oct 1996, Kevin Muenzler wrote:
>
>> I can see it now! Affirmative Action for Amateur Radio! ;)
>
>> Radio but this is rapidly changing. The ONLY reason for this low
>> percentage is lack of interest. That's it, no other reason, nadda.
>>
>
>Kevin, I can't help but notice that you are the first to mention
>affimative action. In fact, a concern about the small number of women that
>are interested in our hobby need not necessarily lead to a call for such
>actions.

It was a joke! You know what those are don't you?

>Secondly, you might want to explain what you mean by 'lack of interest'.
>Interest in radio or in the good ole sexism that is engrained in ham
>radio?
>
>72, VE3UWL

>
> Bruce G. Robertson Dept. of Classics, U. of T.
>
>

Lack of interest?
First we must define interest:
   1. Concern and curiosity about something.
      b. Something that arouses such feelings.

That's what I mean by interest. If a woman has no concern for Amateur Radio and doesn't want to participate then why force it? It could be done for the sheer numbers but then that's back to the Affirmative Action part that I was joking about. I guess we could actively recruit women into Amateur Radio but would that really "help?"
My wife is a perfect example. She got her license, with my "encouragement" but since she had no interest she never used it and let it laps.
Again, that's what I mean by lack of interest. Just like I find tennis, cricket, soccer, and sewing uninteresting so I don't participate.
My choice, that's all. If "women in general" have no interest in Amateur Radio it is their choice not to participate. The fact that you look at numbers only as an indication that Amateur Radio is a sexist hobby doesn't make it so.

Kevin, WB5RUE

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: Female voice and SSB success

There is NO question, in my mind, about whether or not higher-pitched voices can be more easily heard on SSB.

When I was in high school, I used to have my mother come into the shack and sit down and try to snag contest QSOs for several reasons:

1) I always wanted her to feel as though what I was doing wasn't weird.
2) I thought she might like it.
3) I had a much better chance of getting through with her at the mic than ME at the mic.

Number three always resulted - I'd call for 10 minutes, and she'd call twice and get through. I've had the exact same experience with the XYL at the mic.

Of course, CW is another story.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** 145.490- 147.225+ PL 156.7 *

--------------64C4789D304F--

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Seabury Lyon, AA1MY" <SSLYON@postoffice.worldnet.att.net>
Subject: [2765] Re: FYBO: Antennas
Message-ID: <19961024181729.AAA21038@LOCALNAME>

The VEE-Beam is indeed an excellent ant. Joe. The ARRL ant. hbk. does a good write-up on them. They're half a rhombic, essentially, and if you have the room AND need the directivity, a rhombic is the only thing better. As for ice loading, I haven't had any problems since I went to crimp connections from soldered splices, and got rid of the counterweights. 1350' of #14 THHN stays up just fine... -unless the tree breaks! =s=
>
Seabury "Seab" Lyon AA1MY
44 Codfish Hill Road
Bethel, CT, 06801, USA

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: 24-Oct-1996 1333 <randolph@asic.ENET.dec.com>
Subject: [2762] re: gel-cels, battery, charger
Message-ID: <9610241754.AA12142@us4rmc.pko.dec.com>

How come we have all these smart battery chargers for gel-cells? Seems overcomplex to me.

All I did for a gel-cell charger was:
- Pick a transformer with a current rating around the max charge current you want. I used a 250 mA transformer I had around. Make sure it puts out a few volts over your charging voltage at that current.
- Build a simple power supply: diode bridge, big cap, LM317, a couple of resistors, a series diode to block back current. Choose resistors that give you the right charging voltage. I picked about 14V (14.7ish before the diode) for 12V gell-cells. See LM317 apps notes.

That's it. Hook up a discharged battery. The charger puts out maximum current, 250 mA. As the battery voltage comes up, the charger current goes down. Mine bottoms out around 50 mA, which is far too low to ever cook a gel-cell, even if left on for a couple of days.

Simple, easy, foolproof.

==========
Tom Randolph N1OOQ NE-QRP 419 QRP-L 87 ARRL   randolph@asic.enet.dec.com
==========

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Kevin Muenzler <muenzlerk@uthscsa.edu>
Subject: [2783] RE: Ham Exam Generator Website
Message-ID: <01BBC1C0.5EA87300@muenzlerk.uthscsa.edu>

On Thursday, October 24, 1996 7:46 AM, Joe Gervais[SMTP:vole@primenet.com] wrote:
>
>Howdy All,
>
>Sorry if this was already posted here, but it was news to me
>so I figured I'd pass it along. Chris (N3XRV) gave me the URL
>of a great Ham exam generator. Think he got tired of me whining
>about upgrading to Advanced. :-)
>
>"http://w5ac.tamu.edu/ham-exam/"   (Minus the quotes, of course)
>
>Was surprised to find out I could already pass the Advanced
>(the ARRL Advanced Manual does a great job of covering theory,
>IMHO). Anyway, thought some of you might want to give it a
>shot.
>
>Thanks Chris!
>
>Cheers de KC7NEV,
>
>-Joe, vole@primenet.com, AZ ScQRPions
>
>

Here's another good one:
http://www.biochem.mcw.edu/Postdocs/Simon/radio/exam.html

It offers on-line exams or exams sent to you by E-mail.

Kevin, WB5RUE

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: kd1jv@juno.com (Steven Weber)
Subject: [2772] RE: HB: AD811 1W xmitr
Message-ID: <19961024.111609.7295.1.KD1JV@juno.com>

Have to agree with Dana when he says buying an 8 dollar chip to make a 1 watt xtal controlled transmitter is probably not worth it. It gets worse since unless you need other parts, to buy one you need to buy three to meet minumum order. Add to that the shipping and handeling, and your up to over 30 dollars!

Another thing to keep in mind if your thinking of building one of these. Since this is a very high speed op amp, It must be built on a double sided pc board and lots of decoupling used. Ferrite beads in the supply leads at the chip would be a very good idea. Very carefull layout is required or you will have all kinds of instabiltiy problems. Treat it like a VHF or UHF circuit. Just don't build it on a perf board and expect it to work!

Other than that, interesting application for the chip.

de KD1JV, Steve

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Ken Lopez <kjlopez@earthlink.net>
Subject: [2816] Re: HB: OHR 100 20M
Message-ID: <32703A86.7F21@earthlink.net>

Hello All,

I believe that I missed something here. I would appreciate a repost of the entire antenna information.

Thanks, es 73 &72

Ken, N6TZV QRP-l #773

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
Subject: http://www.scn.org/IP/nwqrp/nwqrp.html

Hello, can't originate email here , so clicked on this.
I read N0AX reference to 40 meter beacons, could you
supply more info? Only have info on 20 meter and
10 meter beacons. Freq's schedules, locations etc? Also
am aware the ten meter beacon's were part of the SALT agreement,
Strategic Arms Limitation Agreement, what abt 7 & 14 Mhz?
ge es fb , Earl de kg7om AR

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [2770] Re: MRF476 specs, >25dB @ 14MHz?
Message-ID: <Roam.3.0.1.846182373.18968.myers@bigboy>

Daniel wrote:

>   After some more calculations, it appears that the MRF476 used in many
> circuits is in fact a very high gain part. Essentially I found that my
> driver stage outputs only about 10mW (approx) into the base of the MRF476
> class C finals. The finals, on the other hand yield about 3W under ideal
> conditions. This is at 14MHz. This translates to a power gain of
> approximately 25 dB, probably a little less since I cannot remember the
> exact output at this point of time.
>
> Question 1
> ----------
>
>   According to the power gain vs. frequency chart in Motorola's data book,
> this is a pretty accurate figure. However, I'd like to know what the experts
> think. Is this true in real life? Does the part really have this much power
> gain at 14MHz? Wow! 25dB in a final is a LOT!

Though I haven't used the MRF476 myself, my experience is that the Motorola
charts are usually pretty accurate as long as you can reproduce the conditions
under which the data was collected. It wouldn't surprise me if the the
'476 does indeed have that much gain. You're right - that is a lot of gain,
and may be a stability issue. That's why most designs either use feedback
or shunt loading to reduce the gain and increase stability. Note that the
gain figures were taken with a 20mA collector bias (class AB) - in class
C operation, the gain will probably be lower.

> Question 2
> ----------

>
>   Another thing, does anyone know the input impedance of the MRF476 at
> 14MHz? The chart is really tiny but it looks like about 8 ohms for a class C
> configuration. Can anyone confirm this?

According the table locted on top of the Smith chart, Zin is 8.50 -j0.80
ohms at 15 MHz with 20mA of collector bias current, which is close enough
to 20m. Under class-C conditions, the impedance will be different.

Dana KK6JQ
Dana@Source.Net

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: JEVERHART@cayman.litc.lockheed.com
Subject: [2780] RE: MXM Emergenceiver
Message-ID: <961024161131.2080460f@cayman.vf.mmc.com>

Chuck, you wrote, in part:

>The waveform from the oscillator is not a pure sine wave
>so working on that and think I have it solved with a
>cap strategically placed in the circuit. Why all this
>fuss over a simple oscillator? Well the PA output filter
>is a simple pi with two 270pF caps and 12T #24 on a T50-2
>which I calculate as 0.71uH. This gives me 0.045dB at
>10.116MH, 6.41dB at 10.232MHz, 17.83dB at 30.35MHz, and
>25.86dB at 40.46MHz of attenuation at the harmonics and
>fundamental. So elimination of all harmonics is important
>before I get to the PA. It's a crucial factor as to what
>get's to the filter that determines what is gonna come
>out at the antenna. Fourier series at work and real here
>folks. I'm up to eight pages QRPp format on the technical
>aspects of this topic.

Is the final amplifier running Class A? In a simple rig, I suspect that it
runs class C (or if it runs Class A iut wastes lots of power :-) For a Class C
final, I wouldn't waste a lot of time tring to clean up the drive to it for
two reasons:

1.) The base of the final is a non-linear impedance. It will be a futile
effort to try to get a clean sine wave into this load.

2.) Just by the basic nature of a Class C amplifier much harmonics are generated no matter what the drive waveform. That's the nature of the beast.

OTOH, knock yourself out. The Emergenceiver sounds like a fun project.

72/73,

Joe E., N2CX

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Robert J. Gobrick" <rgobrick@nfld.com>
Subject: [2804] Re: MXM Emergenceiver
Message-ID: <2.2.32.19961024230946.009d5050@nfld.com>

Hi Chuck,

May I suggest that we compare the MXM Emergenceiver with the upcoming SST and of course the now "standard of comparison (my opinion - hi)" Small Wonder Labs SW-40 or SW-30.

As many of you know the SW-40 is on a 3X4 pc board and has QSK and a stable vfo that covers the band making it more useful. I have Bruce's MXM older Simple RX/TX and although it's a lot of fun to play with the xtal control and lack if QSK put it into the "fun" category for me - if I'm in an emergency I'll take the SW-30 anytime (that's if my cellular phone battery dies....)

I think the SW-xx is still around $50 smackers so it's in the same price range as the MXM.

73/72 Bob VO1DRB/WA6ERB

At 19:47 10/24/96 GMT, you wrote:
>
>
>   MXM Emergenceiver
>   MXM Industries
>
>The PC board is 2.5"x3.0" and is done by FAR Circuits.
>The receiver and transmitter are separates but on the same
>board, i.e. this is not a transceiver. The bands available
>from MXM are 30m and 40m.
>
>What makes this rig neat is the case is about 3.0x3.5x1" and
>makes a great little rig for backpacking and travel.

>The entire package is $50 and we will compare with the
>SST as soon as one becomes available and the NorCal group
>announces. The race is on. :-) SST will be without
>case.
>The MXM emerg. is not QSK, but I think it can be.
>
>For what the rig was designed for it fits the bill.
>Remember this rig was designed to throw into the glove
>box of your car or carry around for emergency communications
>thus the derivation of the name.
>
>dit dit
>: Chuck Adams (K5FO CP-60)

 ____
| Bob Gobrick - VO1DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRPer Galore - QRP ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet: rgobrick@nfld.com |
| Compuserve: 70466.1405@compuserve.com |
|____|

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: emaaro@pacbell.net
Subject: [2742] Re: Mystery Guest
Message-ID: <326F8162.15E2@pacbell.net>

Charles Cashion wrote:
>
> Mystery Guest wrote (mg>)
> mg>
> mg> I am currently a Director in the North Hills Radio Club (NHRC), THE BEST
> mg> AMATEUR RADIO CLUB IN THE WORLD. Please feel free to check out our web
> mg> page at:
> mg> http://www.ns.net/~NHRC
> mg> I'm sure you'll enjoy it.
> mg> Oh yes, the rest of the qrp-l group is invited also.
> mg>
> mg> 88s, 72s/73s,   emaaro
> mg>
>
> So, emarro (aka mg), are you allowed to reveal your
> true identity?
> 72s,
> Charles Cashion, W5ISZ, QRP-L#76, ccashion@spd.dsccc.com
> + - +
> | Nine out of ten cows agree.......you should eat more chicken. |

> | Nine out of ten chickens agree...you should eat more vegetables |
> | sun1055!ccashion@uunet.uu.net is * NOT * a valid address!!! |
> + - +

CC:
Check out the NHRC web page and you'll find me listed in the members
section:
http://www.ns.net/~NHRC
Oh yes, thank you for the compliment!

72s/73s, emaaro

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
Subject: [2785] Re: Need help with my first antenna
Message-ID: <199610242040.PAA07750@multi2.pic.net>

John Carter wrote:
> OK--first question.
>
> I'm planning my first antenna. I'll probably go with a
> 40m wire dipole fed with coax using a balun. I need something
> that is not high profile so I'll use thin wire. I saw an
> article somewhere that recommended using #26 enamelled (sp?)
> wire.
>
> Is this adequate for antenna building and where do I get it?
>
> What coax should I use and what is a good source for it?
>
> Thanks in advance for you help,
>
>   Jake (KF4MRE)

A 40 m dipole is an ideal antenna to start with. It is the standard by
which everything else is measured. However, I don't recommend you start
with #26 enameled wire. It just isn't strong enough to support itself very
well, especially with enamel insulation. Within two weeks after you put it
up, it will come down by itself. As Chuck says, been there, done that. I
would strongly recommend copperweld wire for a dipole. Copperweld (r) has
a steel core for strength which is covered by a copper shell. Since the RF
only travels on the surface anyway, it has the same characteristics as
plain copper. It is, however, many times stronger, and won't stretch from

its own weight as copper will. 14 gauge is the most common size used for 40 m dipoles, but you can use 18 gauge as well. Amateur Electronic Supply (800-558-0411) carries 12, 14 and 18 gauge copperweld. A few feet away, 18 gauge is just about as low profile as #26, especially after the shiny copper has weathered a bit. If you must start out stealthy, erect the antenna at night and color the wire with a black permanent marker. (Don't laugh, it looks pretty good!)

There are lots of choices for the coax. Originally, coax was built to a set of specifications whose identifiers started with the letters "RG". If you bought RG8/U, you knew exactly what you bought. In the fifty years since, however, manufacturers have been improving and modifying the construction, so the RG designation no longer describes the exact specifications of the cable, but it is still used to identify the class to which the particular cable belongs. The most common cable classes in use by hams are RG58/U, which is a small, flexible 50 ohm general purpose cable, RG59/U is slightly larger (about 1/4 in. diameter) and has a 75 ohm impedance and is the most common cable used for TV, RG8/U which is the big brother of RG58 but has lower loss and higher power handling capability, and RG174 which is a very small and flexible cable whose loss is too high for all but short runs or portable QRP use where weight is everything.

Generally, the smaller the cable, the higher the loss, but it depends strongly on the type of insulation used inside. Lower loss cables usually are built with foamed insulation or some other form which incorporates a lot of air, which is a low loss dielectric. Better cables are also made with shields which cover more thoroughly. Unfortunately, there are a lot of poor cables sold at the local TV/radio emporiums. Buying a branded cable (like Belden) is usually safer since you can get the specifications for what you buy. These will be identified by the manufacturer's type number as well as the RG classification. For example , Belden sells at least five different varieties of RG58 class cables, but each has its own 4 digit Belden number and specifications.

If your coax cable run is short (25 feet), the loss in the cable won't be too important, and a cheap cable is OK. If the cable run is longer, 40 - 70 feet, start worrying about the loss. If the run is long, 100 feet or more, find the lowest loss stuff you can buy.

Generally, a dipole up in the air without close objects will have an impedance which more closely matches RG59 than the others. However, no dipoles are perfect, and 50 ohm coax is still pretty close. The main reason to avoid RG59 is that most of the RG59 available is cheaply made stuff sold for TV use.

Sample coax types available are:

Belden	RG class	diam	insulation	shield	loss/100'	cost/ft

8259	RG58	.193	solid		96%	4.9 dB	.29
8219	RG58	.193	foam	96%	4.5 dB	.33	
8241	RG59	.240	solid		95%	3.4 dB	.28
9258	RG8/X	.242	foam		95%	3.7 dB	.39
8237	RG8	.405	solid		97%	2.2 dB	.64
9913	RG8	.405	spiral		100%	1.4 dB	.65

Note the RG8/X cable is the same size as RG59 but is 50 ohm, and lies between RG58 and RG8 for loss.

My opinion is that the 9258 RG8/X or a good brand of RG59 would be the best compromise for a typical somewhat-low-profile 40 M dipole antenna.

Make sure you seal any connections which will be in the weather. Leaving a coax cable with a PL259 connector on the end in the rain will allow water to creep into the dielectric insulation. This will drastically alter the characteristics of the cable and increase the loss, especially with foam or other low-loss insulation cables. Seal it with coax seal or similar.

Baluns are another topic. I'll let others on the list give their opinions on that one!

Hope this helps.

Mike K1MG

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: nskousen@scientech.com (Niel Skousen)
Subject: [2788] Re: Need help with my first antenna
Message-ID: <v02140b09ae9588b1ec33@[198.60.91.132]>

OK, in all the discussion on this topic I've heard no one suggest a 40m Inv.V rather than the dipole. Given the enhanced low angle behavior, and slightly more omni-directional patterns and slightly less stringient mounting constraints relative to a dipole, would this be a better first antenna ?

TNX

Niel Skousen
nskousen@scientech.com

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: talljazz@teleport.com (Dan Presley)
Subject: [2805] Re: Novice Fox rpt
Message-ID: <v01530504ae95b7faf325@[206.163.125.31]>

Niel- you did a great job, and battling the QRM is enough to bring anyone to their knees! Thanks for the contact, and sorry for the repeats-your sig was fine here in Portland, but everytime you came back to me my wife cranked up her industrial sewing machine! She has a custom costume business, and halloween is close. Her machine is a great static generator! I listened later to the same freq., and heard lots of SWBC QRM.
Thanks again.
Dan N7CQR Portland, Or.

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [2724] Re: QSL Help
Message-ID: <199610241339.NAA08168@chuck.dallas.sgi.com>

Scott et.al.,

For US QSL information you can do the following and
get the latest and greatest information from the FCC
direct.

Send to LISTSERV@LEHIGH.EDU

in the body put

RUN QRP-L X CALLS2DIST AE4VQ KP3S
RUN QRP-L X CALLS2DIST AE4VQ K5AM

and you will get back two emails, each containing
the name, address, long/lat, and distance between
the two calls used. Put the call last that you
want the FCC information on.

Output will look like:

```
Output from stdout:
AE4VQ  ZIP = 40515
KP3S   QTH = SCHWARZ MIR, GUILLERMO R                L
             HC 03 BOX 7526                          L
             GUAYNABO             PR  00971          L
             (PREVIOUSLY KP4DDB, ADVANCED)


no geo info found for 00971, looking for GUAYNABO, PR

AE4VQ  Lat/Long = 38 02 57 N  84 30 01 W
KP3S   Lat/Long = 18 21 36 N  66 06 36 W

Output from "gc 38.0295N84.3001W 18.2160N66.0660W":

Bearing is 136 Degrees for 1524 Nautical Miles = 1754 Miles = 2822 Km

Hope this helps everyone.  The newbies need to learn about this.
As I have mentioned before I put the distances in the logbook on
the computer for stats and analysis at a later date.  The data
comes in handy for miles/watt calculations.

dit dit
: Chuck Adams (K5FO CP-60) WAS 40m/30m/20m=49/49/50
: EMPS  QSOs=2  STATES(w/c)=2/0  DX=0 : MO TN



From owner-qrp-l@Lehigh.EDU  Thu Oct 24 23:11:44 1996
From: "Robert J. Gobrick" <rgobrick@nfld.com>
Subject: [2808] Re: Special event station W2P/QRP Saturday morning
Message-ID: <2.2.32.19961024235806.009ec14c@nfld.com>

Geez Doug,

I hope we don't have to send Piscataway in code as an exchange.  Can't you
guys pick some other Indian tribal name like the Mohawk or Mohican - even
when I was being raised in the Suffolk County (looong island) NY town of
West Islip all our elementary schools were named after easy-to-spell local
Indian families :^)

Cheers and have fun on the SW-40 73/72 Bob VO1DRB/WA6ERB

At 18:48 10/24/96 -0400, you wrote:
>   This Saturday October 26th the Piscataway Amateur Radio Club
>will activate special event station W2P to celebrate the 330th
>anniversary of the founding of the town of Piscataway.  On
>Saturday morning I will be active using W2P/QRP on or near 7040.
```

>I hope to be active from around 10:00am to about 11:30am. I'll
>be using the SW-40 and either the magmount on the car or the
>40m dipole if I can put it up.
>
>I *might* be able to activate W2P on 20m but I'm not sure. Other
>club members will be using W2P at non-QRP levels, so listen for
>the /QRP.   Other club members will be active as W2P starting
>Friday at 8:00 P.M. Certificate QSLs will be issued.
>
>W2P (not necessary QRP) will also be active on AO-27 on
>the 1130 am pass.
>
>Doug KA2UPW
>dquagliana@aol.com
>Satellite/QRP/Mobile <-- all at the same time.
>
>

 ____
| Bob Gobrick - VO1DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRPer Galore - QRP ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet: rgobrick@nfld.com |
| Compuserve: 70466.1405@compuserve.com |
|____|

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Larry Makoski <n2elw@worldnet.att.net>
Subject: [2817] Re: Special event station W2P/QRP Saturday morning
Message-ID: <32703A50.6C83@worldnet.att.net>

Robert J. Gobrick wrote:
>
> Geez Doug,
>
> I hope we don't have to send Piscataway in code as an exchange. Can't you
> guys pick some other Indian tribal name like the Mohawk or Mohican - even
> when I was being raised in the Suffolk County (looong island) NY town of
> West Islip all our elementary schools were named after easy-to-spell local
> Indian families :^)
>
> Cheers and have fun on the SW-40 73/72 Bob VO1DRB/WA6ERB
> Bob et al,.

Please be assured that "Piscataway" will NOT be any required part of
QSO's with Doug or any other PARC members. :)

As for picking anything easier.....well we were thinking of Lene-Lenape or maybe perhaps Delaware but since the town was ALREADY named before we go there! Hi!

Hope to see you all at some point between 00:00 UTC on 10/26 to 00:00 UTC on 10/28 !!!

73 de Larry N2ELW
President, Piscataway Amateur Radio Club
QRP ARCI #4488
QRP-L #778

n2elw@worldnet.att.net

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Tim Pettibone <tpettibo@nmsu.edu>
Subject: [2751] Re: Sweepstakes Hints
Message-ID: <199610241639.KAA29858@NMSU.Edu>

Boy Duffey, you really know how to throw down the gauntlet. Beat last year's AB5OU record! (Did I really work that many?) OK guy, guess I'll have to take you on. But you are correct, the best way is to have a goal in mind. One year, my goal was to hit 100 and have the privilege of buying a pin to prove it. I've come close to a clean sweep but I'd really like to make it this year. Usually have trouble with the Yukon even though there are several stations on including a wayward KL7 or two who usually wander down there for the contest.

All of the helpful hints are great. I especially enjoyed Chucks long list. Maybe I can do better with SS than I have at the FOX hunt! Have worked one regular and one novice and I won't tell you how many hours I've listened to others (including W6ULU last night working the novice) work non-existent FOXes!

72 Tim AB5OU QRP-L# 73.

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [2754] Re: Sweepstakes Hints
Message-ID: <199610241648.QAA08977@chuck.dallas.sgi.com>

Hint gang: KL7 Saturday 20m twilight. Works for me. That's all
the help you are gonna get. See you Nov2-3. es gl
: Chuck Adams (K5FO CP-60) WAS 40m/30m/20m=49/49/50
: EMPS QSOs=2 STATES(w/c)=2/0 DX=0 : MO TN

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: 24-Oct-1996 0853 <randolph@asic.ENET.dec.com>
Subject: [2722] re: Transistor amplifier design
Message-ID: <9610241322.AA11631@us4rmc.pko.dec.com>

>   Vb = 2.8V
>   Ve = Vb - 0.7 = 2.1V
>   Ic = 60 mA (arbitrary)
>   Ie = Ic (approx)
>   Ib = Ie / B(ac) = 0.7 mA
>   Rin = 25 * B(ac) / Ie = 33 ohms
>   Re = Ve / Ie = 35 ohms (emitter resistor)
>   Vin = Ib * Rin = 25 mV (signal voltage)
>   Rl = Pout / Ic^2 = 119 ohms (load impedance)
>   Pmax = (Vcc - Ve) * Ic = 642 mW
>   Pout = Ic^2 * Rl = 430 ohms
>   Pin = Ib^2 * Rin = 0.016 mW (input power)
>   Gpe = 10 log(Pout/Pin) = 44 dB!
>   Since output looks into a 7.5 ohm load, a 16:1 transformer will be
> needed to transform the 7.5 ohms to 119 ohms.

Looks mostly ok. The only thing I can see that might trip you up is that by saying Vin = Ib * Rin, where Ib was calculated using the DC value of Ie, you are getting the maximum possible signal voltage. Likewise when you calculate Rl, Pout and Pin. You generally don't want a class A amp output to swing from Ic(DC) to zero, as you're too close to clipping. Use a bigger load resistance, and a different output transformer ratio.

Also, beware of peak and RMS power. Peak power is what you're calculating. Divide by 2 to get RMS power (or divide IC by sqrt(2)). RMS power is "real" power. If your transmitter puts out 1W peak, the heating in a dummy load would amount to 0.5W of power.

==========
Tom Randolph N1OOQ NE-QRP 419 QRP-L 87 ARRL   randolph@asic.enet.dec.com
==========

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Thomas J. Whalen" <whalen@swcp.com>

Subject: [2791] Re: Tree Fishin'
Message-ID: <Pine.SUN.3.91.961024153849.2132A-100000@kitsune.swcp.com>

 On Thu, 24 Oct 1996, Chris J. Cartwright - ELF wrote:

> With the recent antenna inquiries I thought the following might be useful.
>
> I've seen the slingshot and fishing reel method written about or
> mentioned several times and always thought, "Yeah, nice idea". Last
> night I stopped by my local Sports Authority and picked up a wrist rocket
> type sling shot, a Zebco 202 reel and some sinkers, total damages $13.
> If I'd have known it were that inexspensive I'd have saved myself a lot
> of time and frustration much, much sooner.
>
> If you haven't seen this setup it is the BEST thing short of a helicopter
> for getting wires in trees. (I'm sure to take heat on that one) Takes a
> little practice (very little) and easily gets over the 75' oaks out back.
> Got dark on me last night before I got done "practicing" but I'll be back
> there again tonight.
>
> P.S. Anyone know what the terminal velocity for the average acorn is?
>   Umm... no reason, just askin'
>
> 72 de N3XRV aka Lumpy :)
>
> -- Chris Cartwright N3XRV Gaithersburg, MD | dsc3cjc@imc220.med.navy.mil --
> -- EMPS QSOs=0 STATES(w/c)=0/0 DX=0 FOX=0 | QRP-L #655   QRP-ARCI #9271 --
>
>
>Hi Chris, I use the same setup and works pretty good. Just wondering if
you put the 202 ahead of the slingshot or behind it? I have my 202 ahead
of the slingshot. Thanks, Tom

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Vic Rosenthal <rakefet@rakefet.com>
Subject: [2803] Re: Wattmeter question
Message-ID: <326FFFB6.1505@rakefet.com>

Glen Leinweber wrote:
>
> In <326FE7DC.53F2@rakefet.com>, Vic Rosenthal wrote:
> >Hi Qr-people,
> >
> >I have an MFJ wattmeter that has 0-300 and 0-30 watt ranges. On the
> >high range (or on the low range with higher power) it seems to work
> >correctly. But on the low range with 5w output, I always get 0

> >reflected power. I presume this is because the diodes are nonlinear (or
> >something). Can anyone suggest a fix (perhaps different diodes)? I
> >don't need a precision wattmeter, but I do want to be able to check SWR
> >at QRP levels.
> >
>
> Hey, wait a minute...could it be the switch? Try the meter backwards,
> with the rig connected to its output, and the dummy load at the
> input. Then reflected power shows up as forward power. And visa
> versa. What's it do then?
> Glen VE3DNL

Glen,

Well, as I increase the power (even on the low range), there's a point
at which I start seeing reflected power. At some point, the meter starts
indicating the correct SWR (it's a cross-needle type). So it seems like
the reflected power section has a 'threshold' of some sort.

Vic K2VCO

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
Subject: [2806] Re: What the codes on Cap's mean?????
Message-ID: <199610250027.TAA23791@multi2.pic.net>

Bill -

In general, caps are labeled with three digits and a letter. The first two
digits are the value; the third digit is the multiplier (like resistors).
This gives the capacitance in pF. The letter is the tolerance (+-) from
the table:

C   0.25 pf
D   0.5 pf
F   1 pf
G   1% (I think)
J   5%
K   10%
M   20%
Z   +80 - 20%

For example:

473Z would be

0.047uF +80% - 20%

The odd ones? Well, your guess is as good as mine.

Mike K1MG

> From: Bill Myers <bmyers@destin.nfds.net>
> To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
> Subject: What the codes on Cap's mean?????
> Date: Thursday, October 24, 1996 3:04 PM
>
> Help!!!
>
> I been outta the building arena for a while. I'm getting back into it again.
>
> I would like to get a good reference book on capacitors, especially
> something that can decode all the numbers so I know what I got.
>
> I aquired a grab bag of caps and I'm not sure what value they are.
>
> The 104Z's I believe are .1mfd.
>
> I know the .01z/p/u are probably .01mfd.
>
> What about the 5.6c/npo, 100m, 560k (is this one like a resistor?), 473z.
>
> And I got some really funny ones with W125
>   L22
>   8525
>   Veco
>
> Any help would be appreciated...
>
> 72/73
>
>
> --
> Bill Myers   KK4KF FISTS #2390 QRP-L #755 ARRL
> Snail Mail P. O. Box 178
>   Shalimar, FL 32579-0178
> Grid   EM60rk
> e-mail   <bmyers@destin.nfds.net>
> homepage   http://destin.nfds.net/~bmyers/
> CHECK OUT THE FISTS INTERNATIONAL CW CLUB HOMEPAGE
> http://n9nvv.qrp.com/~fists

>   ^^^^^ That's N 9 N V V
>

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: myers@bigboy.West.Sun.COM
Subject: [2744] Re: Who to believe, Pout?
Message-ID: <Roam.3.0.1.846172340.11269.myers@bigboy>

Daniel wrote:

> Now, the power output would be given by:
>
>   Pout = Vrms * Vrms / R
>
> and
>
>   Vrms = Vp-p / 2 * sqrt(2) = 15.63 volts
>
> thus
>
>   Pout = 15.63 * 15.63 / 51 = 4.8 watts (approx)

It is often quicker to combine the two equations, giving:

Pout = Vp-p^2 / (8 * R)

or

Pout = Vpeak^2 / (2 * R)

In a 50 ohm system, you square the peak voltage and divide by 100
(which is easy since it just means moving the decimal point).

> So now, the scope says 4.8 watts and the meter says 3.8 watts. Question, who
> do I believe? Are my calculations correct? Did I miss out something, or
> added something which should not be there? Which would you believe, the
> scope or the meter?

One (or both) instruments is telling you something other than it
really is, but the difference is about 1dB - which isn't a very big
error for RF measurements ;-).

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996

From: 24-Oct-1996 1324 <randolph@asic.ENET.dec.com>
Subject: [2758] re: Who to believe, Pout?
Message-ID: <9610241734.AA10016@us4rmc.pko.dec.com>

> So now, the scope says 4.8 watts and the meter says 3.8 watts. Question, who
> do I believe? Are my calculations correct? Did I miss out something, or
> added something which should not be there? Which would you believe, the
> scope or the meter?

Daniel,
I'd believe the scope unless you know the calibration of the meter is set
accurately at the freq you're measuring. Do a couple of simple voltage
measurements with the scope if you need to convince yourself.

==
Tom Randolph N1OOQ NE-QRP 419 QRP-L 87 ARRL   randolph@asic.enet.dec.com
==

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
Subject: [2787] Re: Who to believe, Pout?
Message-ID: <199610242055.PAA07960@multi2.pic.net>

I would trust the scope first.

But... is the dummy load a good one at the freq in use? You didn't
mention the freq. I assume we are talking HF here. Any SWR on the line
will cause dramatic variations in line voltage. Confirm this by adding a
ten foot piece of coax into the line to the dummy and taking the same
measurements.

What kind of wattmeter is it? Many of them lose accuracy pretty badly at
low power levels because they don't compensate for the diode conduction
curve. That's why I would trust the scope first.

Your calculations seem fine.

Mike K1MG

Dan wrote:
> Hi Gang,
>
>   Here's another brain teaser:-
>

> I am measuring a signal fed into SWR and Power meter (good to 150 MHz).
On
> the meter, this CW signal reads about 3.7 watts or so. The output of the
> meter is connected to a 51 ohm dummy load. Simultaneously I am looking at
> the waveform on a high frequency scope and X10 probe, both rated to 150
MHz.
> On the scope, I see a clean sine wave, with a peak to peak voltage of
44.2
> volts (scope has measurement features).
>
> Now, the power output would be given by:-
>
>   Pout = Vrms * Vrms / R
>
> and
>
>   Vrms = Vp-p / 2 * sqrt(2) = 15.63 volts
>
> thus
>
>   Pout = 15.63 * 15.63 / 51 = 4.8 watts (approx)
>
> by contrast, a 3.7 watts output should be giving me a 38.8 volts peak to
> peak waveform.
>
> So now, the scope says 4.8 watts and the meter says 3.8 watts. Question,
who
> do I believe? Are my calculations correct? Did I miss out something, or
> added something which should not be there? Which would you believe, the
> scope or the meter?
>
> 73 de 9V1ZV Daniel
> --
> *------------+-------------------------------------+
> | Daniel Wee | daniel@pandora.lugs.org.sg |
> | 9V1ZV | danwee@singnet.com.sg |
> | QRP-L #667 | daniel.wee@f516.n600.z6.fidonet.org |
> +------------+-------------------------------------+

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: Mark Arvidson <vonowski@sound.net>
Subject: [2763] Re: YL Voice on SSB
Message-ID: <326FB1A2.1180@sound.net>

The military uses female voices in the cockpits of their aircraft for
the "Eject! Eject! Eject!" messages. I asked somebody once, who said

that the pilots (all men at that time) responded much more quickly to a female voice. They had actually done studies.

I don't know if female pilots respond the same way.

Mark Arvidson
vonowski@sound.net
KB0SPQ

From owner-qrp-l@Lehigh.EDU Thu Oct 24 23:11:44 1996
From: jgann@mindspring.com (Alvin G. Gann)
Subject: [2778] Re: YL Voice on SSB
Message-ID: <199610241959.PAA08899@itchy.mindspring.com>

  .....
>I don't know if female pilots respond the same way.
  .....
They probably do. After all, they had mothers too.

72 --Jerry W1UI